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THE CHINA SURGE

Lourdes Casanova, Senior Lecturer, Academic Director
Anne Miroux, Visiting Fellow

Emerging Markets Institute
S.C. Johnson School of Management, Cornell University
http://www.johnson.cornell.edu/Emerging-Markets-Institute

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Authors

Lourdes Casanova, a Senior Lecturer and Academic Director of the Emerging Markets Institute at the Johnson School of Business at Cornell University, formerly at INSEAD, specializes in international business with a focus on emerging market multinationals. Appointed in 2014 and in 2015 as one of the 50 most influential Iberoamerican intellectuals by Esglobal. She is also a Faculty Fellow at the Atkinson Center for a Sustainable Future.

A Fulbright Scholar with a Master degree from the University of Southern California and a PhD from the University of Barcelona. Visiting professor at Haas School of Business at the University of California at Berkeley, Judge Business School at University of Cambridge and at the Latin American Centre at the University of Oxford, University of Zurich, and Universidad Autónoma de Barcelona and consultant of the Inter-American Development Bank. Taught, directed executive programs at INSEAD for senior managers from multinationals including Telefónica, BBVA and Cemex and the Brazilian Confederation of Industries.

Co-author with Julian Kassum of: *The Political Economy of an Emerging Global Power: In Search of the Brazil Dream*, Palgrave Macmillan 2014, author of *'Global Latinas: Latin America's emerging multinationals'* Palgrave Macmillan 2009, coauthor of *Innovalatino, Fostering Innovation in Latin America*, Ariel 2011 and articles in journals including Beijing Business Review, International Journal of Human Resource Management, Business and Politics and Foreign Affairs Latinoamérica.

Member of Latin America Global Agenda Council and the Competitiveness in Latin America taskforce of the World Economic Forum, Advisory Committee European Union/Brazil, World Investment Network at UNCTAD, the B20 Task Force on ICT and Innovation in Los Cabos, responsible at INSEAD of Goldman Sachs 10,000 women initiative and co-leading InnovaLatino on Innovation in Latin America. Board member of the Boyce Thompson Institute, the start-up Documenta, founding Board Member of the Societé des Amis du Chateau de Fontainebleau and member of the Advisory Council of the Tompkins Public Library.

Anne Miroux is Faculty Fellow at the Emerging Markets Institute, Johnson School of Management at Cornell University. She has over thirty years of experience in international trade and finance. She began her career in the United Nations Centre on Transnational Corporations in New-York, and later joined the United Nations Conference on Trade and Development (UNCTAD) where she specialized on developing country debt, foreign direct investment and transnational corporations, and technology and innovation policies. For several years she directed the World Investment Reports (WIR), the United Nations flagship report on FDI and transnational corporations and served as the Editor of the UN Transnational Corporations Journal. She published a number of papers and articles and led research projects and technical assistance activities in developing countries on debt, FDI and development.

Until late 2015 Anne Miroux was the Director of the Division on Technology and Logistics in UNCTAD, and Head of the Secretariat of the UN Commission on Science and Technology for Development (CSTD).

She is a member of the Advisory Board of the Technology and Management Center of the Department of International Development at Oxford University. She is also a member of the Board of NetExplo.

Anne Miroux has an MBA from HEC, Ecole des Hautes Etudes Commerciales, and a diploma from IEP (Institut d'Etudes Politiques – Paris). She holds a PHD in Economics from University of Paris I - Sorbonne.

Preface

"Emerging markets represent 'underfunded growth opportunities with problems.' These problems impede their ability to secure the very funding they need to fully realize their growth opportunities. To my mind, this is what really sets them apart and it is the guiding principles for me and many scholars who have been studying EMs over the past decades.

In fact, it was the challenge of defining these so-called problems that led the Johnson School at Cornell University to launch its Emerging Markets Institute (EMI) in 2011. My colleagues and I are very proud of EMI, the many activities which it spearheads, the thought leadership it inspires, and especially under the able leadership of Dr. Lourdes Casanova, its executive director for the past two years.

The newest initiative of the EMI is The Emerging Market Multinationals Report (EMR), co-authored by Dr. Lourdes Casanova and her collaborator, Dr. Anne Miroux, which I commend as important reading for anyone who invests in or pursues new business opportunities in EMs. What the report does is flip our guiding principles on their heads. The focus is on EMs *not* as economic engines dependent on external financing from elsewhere, but as the very drivers of those outbound global capital flows. And it puts EM-based multinationals squarely in our sights as the mechanisms through which those flows arise. We learn about the 146 companies from the largest 20 EMs – what Casanova and Miroux call the "eMNCs" - come from a diverse group of industries, that they reveal remarkably different fundamentals and that they drive outbound foreign direct investment flows to a wide range of target markets. A special chapter features the surge of China-based eMNCs and their voracious cross-border acquisition activity with fascinating facts about the unusual geographic array of target countries and about the differences in terms and conditions under which the deals go down.

I predict that the report will change your priors on EMs and eMNCs. It certainly changed mine."

Andrew Karolyi
Professor of Finance and Harold Bierman Jr. Distinguished Professor of Management
Associate Dean for Academic Affairs
S.C. Johnson Graduate School of Management
Cornell College of Business
Cornell University
Author, Cracking the Emerging Markets Enigma (Oxford University Press, 2015)

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Abbreviations and Acronyms

ADB	Asian Development Bank
AEC	ASEAN Economic Community.
AIIB	Asian Infrastructure Investment Bank (AIIB)
ASEAN	Association of South East Asian Nations
BNDES	Brazilian National Development Bank
BRIC	Brazil, Russia, India, China
BRICS	Brazil, Russia, India, China and South Africa
ECLAC	Economic Commission for Latin America and the Caribbean
EMI	Emerging Market Institute
eMNC	Emerging market multinational corporation
EMnet	OECD Emerging Markets Network
EU	European Union
FDI	Foreign direct investment
FTSE	Financial Times Stock Exchange 100 Index
GDP	Gross domestic product
GFC	Global Financial crisis
GII	Global Innovation Index
GFSR	Global Financial Stability Report
GVC	Global value chain
ICT	Information and communication technology
IFC	International Finance Corporation
IMF	International Monetary Fund
ITU	International Telecommunications Union
M&A	Mergers and acquisition
MNC	Multinational corporation
MSCI	Morgan Stanley Capital International index
NASDAQ	National Association of Securities Dealers Automated Quotations
NDB	New Development Bank

NYSE	New York Stock Exchange
OECD	Organization for Economic Cooperation and Development
OFDI	Outward FDI
PISA	Program for International Assessment Student
PPP	Purchasing power parity
R&D	Research and development
RCEP	Regional Comprehensive Economic Partnership
SDRs	Special Drawing Rights
SEC	Security and Exchange Commission
SME	Small and medium-sized enterprise
SOE	State owned enterprise
TEV	Total enterprise value
TNC	Transnational corporation
TNI	Transnationality Index
TPP	Trans-Pacific Partnership
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNIDO	United Nations Industrial Development Organization
UNDESA	United Nations Department of Economic and Social Affairs
(or DESA)	
USITC	United States International Trade Commission
WIPO	World Intellectual Property Organization
WTO	World Trade Organization
YTD	Year to date

Executive Summary

Emerging economies are one of the hallmarks of today's global economy, and the dramatic rise of their multinationals, also known as emerging market multinationals (or eMNCs), is a testimony to their growing weight and influence. The past fifteen years have seen the remarkable overseas expansion of such enterprises, a phenomenon that is bringing about profound changes in a wide array of areas, whether in terms of displaced trade and investment flows, new business models and the emergence of a new geography of global innovation for instance. This phenomenon is part and parcel of the reconfiguration of the new global economic and political landscape that we are witnessing in these early decades of the XXIst century. The Emerging Market Multinationals Report (EMR) series published by the Emerging Market Institute (EMI) aims at contributing to a better understanding of this phenomenon and its economic and societal implications. This first issue of the series sets the overall contours of the phenomenon and examines some characteristic of the eMNC expansion.

Emerging economies are the new heavyweights

The E20

Argentina, Brazil, Chile, China, Colombia, Egypt, Indonesia, India, Iran, Malaysia, Mexico, Nigeria, Philippines, Poland, Republic of Korea[1], Russia, Saudi Arabia, South Africa, Thailand, and Turkey.

Emerging economies in this report are examined through the experience of the E20, a grouping of 20 top emerging economies – selected among emerging economies, based on the size of their GDP and population and of significant influence in global and regional trade and investment. The E20 includes countries from Africa, Asia, Latin America as well as Poland and Russia (see box).

Emerging economies display a number of features (demographic; economic; soft power attributes; as well as others related to technology, innovation and education) that have contributed to their new positioning globally. Accounting today for more than 50 % of the world's population, and almost half of the global GDP, the E20 countries occupy a major place on the world scene. Many emerging economies in the E20 have registered strong growth rates over the past twenty years, which explain their key contribution to global output today. They have developed innovation and technological capabilities and a number of them have become significant sources of innovation, with sometimes cutting-edge technologies in industries such as computer industry, energy, solar, transport or mobile services - to name a few. Developments in the area of global governance and international cooperation with, for instance, the creation of multilateral institutions such as the New Development Bank (NDB) and the Asian Infrastructure Investment Bank (AIIB) are signs of their growing influence, enhancing their ability to exercise soft power on a global scale. The recently approved IMF quota and governance reforms that strengthen their representation in the IMF's governance structure also reflects the new dynamics of the global economy, and the growing key role of emerging economies.

Emerging economies are—and will remain—quite diverse. Vulnerability to external shocks and currency volatility has often characterized them. It would be unwise, to expect that the growth achieved by a number of them over the past fifteen years could be maintained in the future. There will be ups and downs, of a bigger or smaller order, depending on each situation. But, overall, their remarkable rise over the past decades has definitely challenged the status quo. A new global landscape has crystallized before our eyes. The impressive breakthrough of emerging economies as foreign investors and the spectacular blossoming of some of their firms as world champions, the topic of this report, is but one illustration of this profound transformation.

A radically different global FDI landscape has settled in

The global Foreign Direct Investment (FDI) landscape has gone through profound changes in the past two decades with the consolidation of emerging economies as key players both as recipients and sources of FDI. The E20 for instance accounted for 30% of global inward FDI flows on average over the past five years.

As regards to outward FDI, the rise of emerging economies as key outward investors started later but has been particularly impressive since the early 2000s, especially in the aftermath of the Global Financial Crisis: for instance, E20 economies account today for 20% of global OFDI flows; their share was 2% at the turn of the century. This trend was led by Asia whose flows have clearly outpaced those from Latin American emerging economies, especially after the Global Financial crisis. In 2015, two of the E20 countries (China and Korea) were among the top 15 investors in the world, with China in the third top position.

Differences between OFDI support policies partly explain this situation: for instance, in China and Korea—the two largest investors of the E20 in 2015—the internationalization of enterprises has become a strategic issue and OFDI support policies have been instrumental to achieve it. This has not been the case in Latin America where pro-active OFDI support policies have been very limited or non-existent. Even in Brazil - long unique in the region in this respect - support for OFDI, however limited, appears to have lost traction in recent years.

The geographical distribution of OFDI from emerging economies has also evolved, even if such FDI still remains largely South-South. While investors from emerging economies used to invest primarily in other emerging and developing economies, usually in their neighboring region, their natural market, a number of multinationals from emerging economies have ventured forcefully into more distant destinations in the past decade. For instance, the evolution of the OFDI stock of two major economies in the E20, Brazil and China, has increasingly shifted towards developed countries. There is also a notably growing presence of Asian investors (such as China and Korea) in Latin America and Africa, even though

the reverse is not true.

Emerging Market Multinationals have made it to the top

Emerging market multinationals that are behind the radical change in the global FDI landscape have not only significantly increased their investment abroad, they have also made it to the top. This is illustrated for instance by the evolution of the Fortune Global 500 list, one of the oldest rankings by revenues of global companies. About 30% of the Fortune Global 500 enterprises for instance are from the E20 today; they were less than 10% ten years ago.

Here again, as in the case of OFDI flows, the Chinese lead the trend. However, although among emerging economies, enterprises from China dominate the ranking, a wide array of E20 countries are represented (14 in total), some of them with only one entry in the list. By decreasing order of importance, the new players are coming mostly from China, Korea, India, Brazil, Russia, Mexico and Indonesia.

While the Global Fortune 500 companies overall are from a diverse group of industries, those from the E20 are more concentrated: seven industries in particular (Petroleum refining; Mining, Crude Oil Product; Commercial and Savings Banks; Metals; Motor Vehicles and Parts; Energy; and Engineering and Construction) are represented, accounting for more than 60% of all the E20 eMNCs. It is also interesting to note that there is a relatively marked "winner take all tendency" in emerging markets. For instance, the Fortune Global 500 top 10 companies of the E20 concentrate a large share of revenues and profits (respectively 29 and 40 % of the total revenues and profits of the largest 100 firms in the E20).

Not only has the presence of emerging market firms in the Global 500 substantially increased, another development has also progressively taken place: a change of guard at the very top. Indeed, a number of the new players have now become world industry leaders. If we consider, for instance, the five top leaders of eight industries (Banking, Logistics, Automobile, Telecom, Engineering & Construction, Petroleum Refining, Mining, Crude Oil Production and Metals), 40% of these leaders were firms from E20 countries in 2015 (largely dominated by China); there were none in 2004.

Remarkable inroads, but still some way to go

Emerging market multinationals have made remarkable inroads as global corporations, becoming world leaders as measured by revenues. In terms of profits, market capitalization and international presence, however, they still have some way to go compared to the more established western multinationals.

Overall, the average profit margins of eMNCs lag behind that of their US and Japanese counterparts for instance. Emerging Multinationals appear to be looking for growth in revenues rather

than profit margins for the moment. The differences are relatively significant, whether one considers the E20 firms as a whole (27% of the eMNCs in the Fortune Global 500 achieve a profit margin above 5% versus 39% if one considers the whole Fortune Global 500) or at the industry level. There are, however, some notable exceptions such as Chinese firms in Banking and Korean ones in Automobiles.

As regards market capitalization, the gap between older/western and newer/emerging multinationals has become wider. While there are today twenty-seven eMNCs among the 100 largest firms by revenues, there are only seventeen by market capitalization. Emerging multinationals display a lower market capitalization on average than, for instance, US firms. Whether eMNCs will manage to close this gap remains to be seen because of the different financial cultures and contexts in which they operate. Indeed, while stock markets are the main source of corporate finance in, for instance, the United States, most eMNCs rely more on corporate debt than equity finance.

Regarding geographical expansion, Emerging market multinationals are not as international as leading American and Japanese companies for instance, but they are becoming increasingly so. European and American companies dominate the UNCTAD list of top 100 firms ranked by foreign assets but, if we consider the number of countries in which firms are present, the picture is different. For American companies, that number on average is triple that of Chinese firms; the difference is much less with the rest of Emerging Multinationals. In addition, the difference is also less marked between the very top US and Chinese multinationals. Overall, unlike what is quite commonly thought, the global footprint of Emerging multinationals is larger than expected and this will most likely continue to grow in the future.

China – An Emerging Global Acquirer

The emergence of China as a significant global acquirer is another distinctive feature of the new global FDI landscape; the surge was particularly marked after the Global Financial Crisis. While in 2000 China virtually had no outbound M&A, the value of its announced outbound M&As reached $138 billion in 2015, placing it in 5th position in the world between Singapore ($121 billion) and Netherlands ($171 billion), but still far behind the U.S. ($488 billion). This surge in M&A activity has been fueled, in particular, by technology and knowledge-driven acquisitions in developed markets, as well as natural resource driven acquisitions in Latin America and other parts of the world. The geographic distribution of Chinese outbound M&A, in fact, has shifted significantly towards Europe and Latin America in the post-financial crisis period. Not only has the overall amount of announced M&A transactions by China increased substantially, available information also suggests that the deals have been on average bigger and more expensive, with for instance Chinese firms willing to pay a premium on average higher since 2009 than in the pre-financial crisis period (2000-2008). Very recent developments suggest that the M&A drive of Chinese firms may be not be over soon.

The very top Chinese firms, such as the largest one in the Banking, Petroleum, Automotive and

Metal industries for instance, have been quite active in overseas M&As. Interestingly, relative to their US counterparts, these firms, while still much younger and (directly or indirectly) state-controlled, are comparable in terms of total assets, revenues and market capitalization. Partly through increased M&A activity, they have acquired a global presence that is also on a par with top global MNCs in the United States.

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OECD contribution on "Expanding Business through Regional Integration in Asia"

Strengthening regional integration and economic community initiatives is essential to support growth and development. It increases market size, spurs innovation, investment and job creation and enhances macroeconomic stability through policy coordination.

Focusing on Southeast Asia, China and India, with a particular focus on the ASEAN Economic Community, the OECD contribution on "Expanding Business through Regional Integration in Asia" offers insights, and policy recommendations from the business sector, on the trade and investment implications of enhanced economic integration. It highlights that, even in the context of a Chinese slowdown, enhanced regional ties in Asia can still generate significant opportunities for private sector growth. The ASEAN Economic Community (AEC) in particular has the potential to support higher trade and investment in the region. This process can be particularly beneficial for multinational corporations from emerging Asia: due to geographical proximity and familiarity with the regional context, they have the potential to enjoy higher market penetration and lighter cost structure than their competitors from developed economies. Challenges however remain, in areas such as trade and non-tariff barriers, human resources development, infrastructure and connectivity. Although regional ties have been significantly enhanced in the region since the 1980s, additional policy efforts are required to fully achieve integration targets.

Chapter 1

E20 The New Heavy Weights

Emerging markets have gained significant ground since the start of the new millennium. In particular, they attracted significant attention during the Global Financial Crisis and the ensuing economic recession, to which they proved more resilient than the major economies in the developed world. In the past twenty years, emerging markets have enhanced economic growth, deepened integration in international markets, and expanded innovation and technology capabilities. This growing influence has provided them with increasing leverage over the world economy. While emerging markets may now face greater hardships, their ongoing endurance suggests that they will remain consequential protagonists of present and future global trends, as well as a challenge to traditional economic powers.

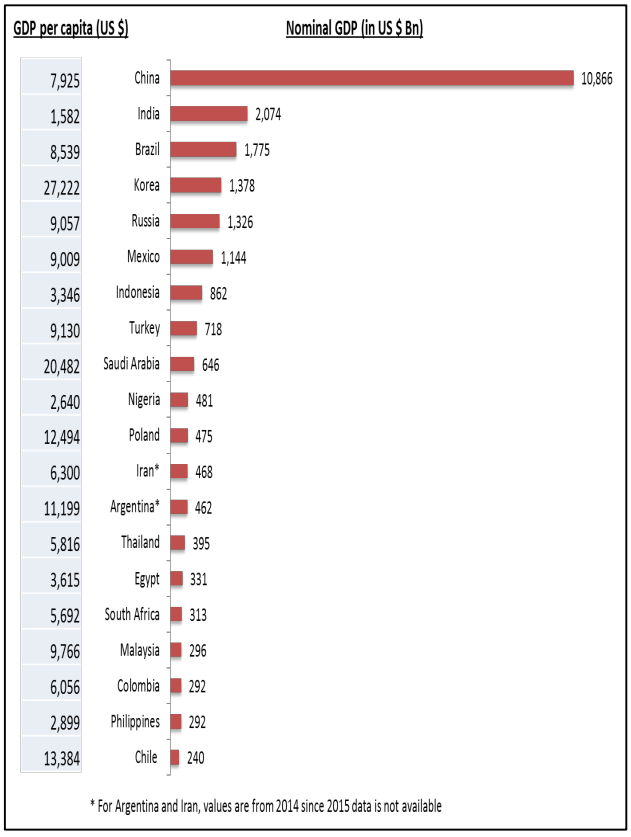
Emerging markets are one of the hallmarks of today's global economy. They have become a hot topic among businesses, policy makers, international organizations, research institutions and others since the beginning of the new millennium.

The term "emerging markets" was coined in 1981 by Antoine van Agtmael, an economist at the IFC.[1] It was used by fund managers to describe equity, bond, or currency markets mainly in developing countries with not only strong growth potential, but also high risk and volatility. Initially a mostly finance and investment related category, the term evolved into a broader economic concept for comparing and grouping together diverse types of countries or economies.

Today, "emerging markets" and "emerging economies" are often used interchangeably, which can be a source of confusion.

There is no agreed upon definition of emerging markets or economies. Nevertheless, the term commonly refers to countries or economies that are in a transitional phase with the potential to become significant players in the global landscape. Criteria referring to the wealth of an economy, its growth trajectory, the state of its financial markets, and even its political system and institutions are considered on different occasions in various definitions. This report defines an emerging economy on the basis of the following distinctive features: (1) its level of development, (2) its upward trajectory towards a mature stage of development, (3) its increased integration in the world economy (through trade and FDI in particular), and (4) its potential to play a significant role in the global economy.

Figure 1: The E20 Emerging Economies – Ranked by Nominal GDP in 2015



Source: Based on data from the World Bank (World Development Indicators) http://databank.worldbank.org/data/home.aspx (accessed July 2016)

As can be seen from the various groupings offered by analysts over the years, emerging economies—irrespective of definition—are quite diverse. Indeed, a number of phrases and acronyms have been used to designate specific groups within the category of 'emerging economies,' including BRIC (Brazil, Russia, India, China), which appeared in 2001,[2] later to become the BRICS with the inclusion of South Africa; the Next Eleven (Bangladesh, Egypt, Indonesia, Iran, Korea, Mexico, Nigeria, Pakistan, Philippines, Turkey and Vietnam) in 2005; [3] and the CIVETS [4] (Colombia, Indonesia, Vietnam, Egypt, Turkey and South Africa) in 2009, to name a few.[5]

A number of market research institutions and international organizations also classify countries as emerging markets or economies, each setting up their own list as illustrated below (see Table 1 in Annex). Some countries appear in several lists. For the purpose of this study, we used these lists as a basis and considered the size (as measured by nominal GDP) and weight (in terms of demography) of each economy to draw a list of the top 20 emerging economies – the E20 (Figure 1)[6]. The E20 includes 18 developing economies[7] from Africa, Asia and Latin America, the total of which represents about two-thirds of all developing economies' Gross Domestic Product (GDP), as well as Poland and the Russian Federation. Altogether, in 2015, the E20 accounted for 46% of the world GDP on a PPP basis. The reports draws on the E20 grouping to illustrate the emerging markets phenomenon.

As we shall see, emerging markets and E20 in particular have become the 'new heavyweights' of the world economy. They display a number of features (such as demographic and economic; soft power attributes; as well as others related to technology,

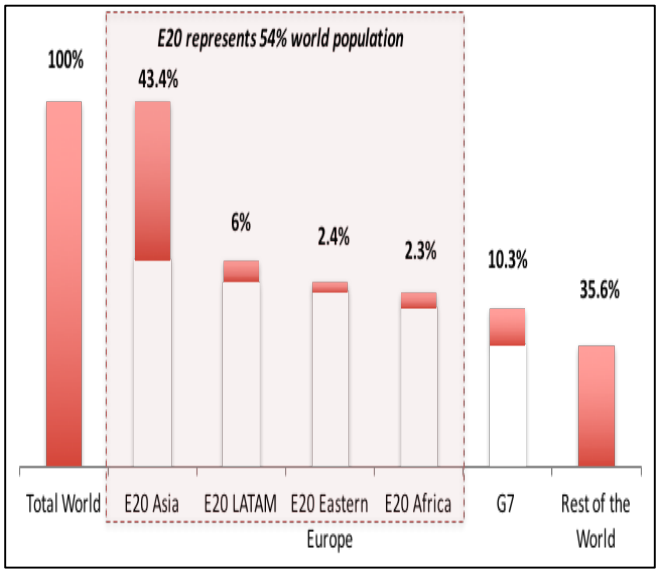
innovation and education) that have contributed to their new positioning globally.

1.1 - Demographics: A Fundamental Parameter

Emerging economies are endowed with a large and growing population. With close to four billion people, the E20 accounts for more than half of the world population today[8] (Figure 2). By comparison, only 10% of the world population lives in the G7 countries[9] and 17% in the OECD countries.[10] While the population of G7 countries has increased at a annual rate of 0.51% since 2000, that of the E20 countries rose annually by 1% over the same period.

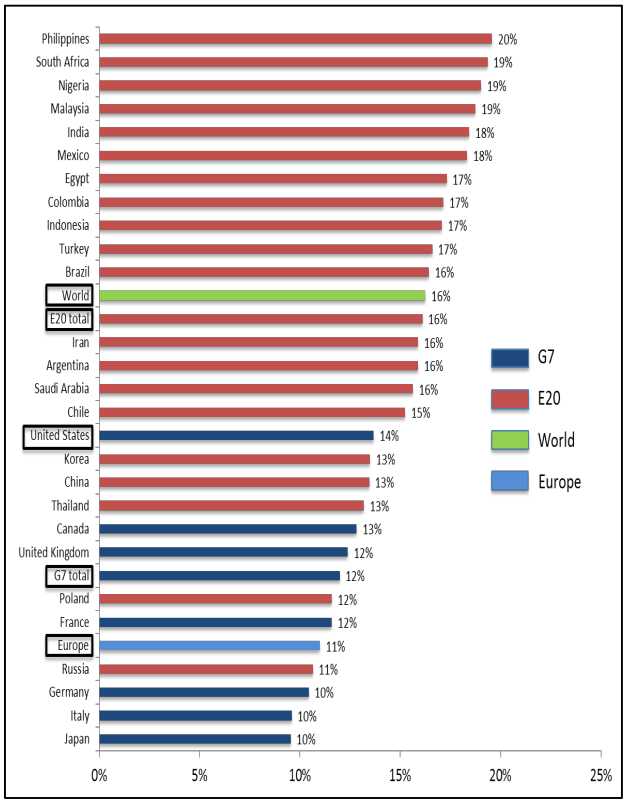
A young population characterizes the demography of E20 emerging economies (Figure 3).
Indeed the share of the youth (defined as 15-24 years of age) in the E20 population reaches 16%, compared to 12% in the G7, 14% in the USA and 11% in Europe.[11] While a young population implies higher budget expenditures, in education for instance, it is also a source of untapped wealth, by enlarging the pool of skills potentially available, as well as the size of the workforce and the potential consumer market. In the medium term, a young population can be a positive growth factor.

Figure 2: Population Comparison - E20 vs. G7, UNDESA, World Population Prospects 2015



Source: Authors' calculation based on data from UNDESA (Population Division), World Population Prospects 2015 https://esa.un.org/unpd/wpp/ (accessed March 2016)

Figure 3: Share of Youth in the Population of E20 and Selected Countries



Note: population estimates as of July 2015
Source: Based on data from UNDESA (Population Division*), World Population Prospects 2015* (https://esa.un.org/unpd/wpp/ - accessed March 2016).

Indeed, demographic dynamics in the E20 are characterized by an increasing proportion of working

Table 1: E20 and G7 – Percentage of Working Age Population

	E20						G7		
	Latam	Eastern Europe	Africa	Asia	West Asia	E20	G7	Unite State	Japan
1964	53.2%	63.1%	54.7%	55.1%	52.4%	55.5%	63.2%	60.12%	67.32%
1974	54.6%	67.4%	54.4%	55.6%	53.8%	56.2%	64.3%	63.97%	67.96%
1984	57.4%	66.9%	53.9%	60.3%	54.3%	59.9%	67.0%	66.38%	67.90%
1994	61.2%	66.0%	54.8%	63.0%	56.9%	62.3%	67.0%	65.58%	69.71%
2004	64.7%	70.4%	57.5%	66.9%	65.6%	66.3%	66.8%	67.07%	66.77%
2014	67.4%	70.3%	57.7%	69.3%	69.0%	68.3%	65.0%	66.55%	61.36%

Source: Authors' calculation based on data from the World Bank (Health Nutrition and Population Statistics: Population Estimates and Projections)

age people[12] relative to the total population, especially since the early 1970s (Table 1). This is in sharp contrast with the situation in some of the major developed economies such as Japan, the EU, and to a lesser extent, the United States.

A large proportion of the working age population can have a significant positive impact on growth (the so called "demographic dividend"). However, this is not automatic: it needs to be accompanied by adequate levels of education and health.

It is interesting to note that for a few major members of the E20, the population age structure has begun to change in recent years. In China, for instance, the population is rapidly aging: today about 15% of the population is above 60, but if present trends prevail, this ratio will reach 25% by 2030 (it was 7% in 1980)[13]. Korea is faced with an even more acute situation, with more than 30% of its population expected to be older than 60 by 2030[14]. The impact of these changes on the economy is not yet clear: the needs of this ageing population will have to be taken care of, which means not only increased additional social expenditures, but also the development of new activities. That being said, in the medium term, the share of the working-age population of the E20 countries will continue to exceed that of the major developed economies: projections indicate that by 2050 this share will still be above 66 percent for the E20 and less than 60 percent for the G7 (Table 2).

Thanks to their demographic characteristics, E20 economies represent a significant potential consumer market. While global consumer demand used to be concentrated in developed countries, a new middle class has been developing in emerging economies and is expected to play an increasing role in global consumer spending. Middle class consumer spending in North America and Europe, for instance, accounted for almost two-thirds of global consumer spending in 2009. This could well fall to only 30 per cent by 2030, as a result of a significant shift towards emerging economies, especially in Asia.[15]

1.2 - Economic Performance

Comparing the economic growth of the E20 and the G7 reveals substantial differences. While the GDP of the E20 at Purchasing Power Parity (PPP) grew at an average annual rate of 7.4% over 1995-2015, that of the G7 grew much more slowly, at about 3.6% over the same period. As a result, the contribution of the E20 to global GDP increased substantially: in about 15 years, its share in global GDP rose by 15 percentage points, reaching in 2015 almost half of world GDP (46% - GDP at PPP) (Figure 4). By contrast, the contribution of the G7, though still significant at 31%, is much lower today than at the turn of the century. In this respect, the global financial crisis has been a turning point (as Figure 4 illustrates).

Today, based on Nominal GDP, nine emerging economies are among the twenty largest in the world compared to only seven twenty years ago (Figure 5), with the E20 represented in the top ranks by China (2), India (7) and Brazil (9). On GDP (at PPP), China is ranked first, while twelve emerging economies feature among the twenty largest (Figure 6).

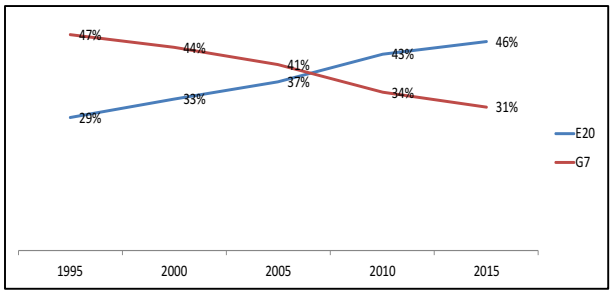
Table 2: E20 and G7 – Percentage of Working Age Population Projections

	E20						G7		
	Latam	Eastern Europe	Africa	Asia*	West Asia	E20*	G7	United States	Japan
2020	68.2%	66.5%	57.9%	68.6%	69.0%	67.6%	63.2%	64.71%	58.94%
2030	68.0%	64.3%	58.7%	68.2%	69.5%	67.3%	61.7%	62.86%	58.17%
2040	67.5%	63.8%	60.0%	67.6%	70.1%	66.9%	60.0%	61.11%	57.35%
2050	66.7%	64.8%	61.0%	66.5%	69.9%	66.0%	58.9%	60.60%	55.96%

*Does not include Malaysia as data unavailable

Source: Authors' calculation based on data from the World Bank (Health Nutrition and Population Statistics: Population Estimates and Projections)

Figure 4: Share of Global GDP (at PPP), E20 and G7:



Source: Authors' calculations, based on data from the World Bank *(World Development Indicators)* (http://databank.worldbank.org/data/home.aspx - accessed July 2016)

Figure 5: Twenty Largest Economies in the World, 1995 and 2015 by Nominal GDP

1995 Rank by Nominal GDP	Country	1995 Nominal GDP (in $ Bn)	2015 Rank by Nominal GDP	Country	2015 Nominal GDP (in $ Bn)
1	United States	7,664	1	United States	17,947
2	Japan	5,334	2	China	10,866
3	Germany	2,592	3	Japan	4,123
4	France	1,610	4	Germany	3,356
5	United Kingdom	1,238	5	United Kingdom	2,849
6	Italy	1,171	6	France	2,422
7	Brazil	786	7	India	2,074
8	China	732	8	Italy	1,815
9	Spain	613	9	Brazil	1,775
10	Canada	604	10	Canada	1,551
11	South Korea	559	11	Korea	1,378
12	Netherlands	447	12	Australia	1,340
13	Russia	396	13	Russia	1,326
14	Australia	368	14	Spain	1,199
15	India	367	15	Mexico	1,144
16	Mexico	344	16	Indonesia	862
17	Switzerland	342	17	Netherlands	753
18	Belgium	290	18	Turkey	718
19	Sweden	264	19	Switzerland	665
20	Argentina	258	20	Saudi Arabia	646

E20	G7	Other

Source: Based on data from the World Bank *(World Development Indicators)* (http://databank.worldbank.org/data/home.aspx - accessed July 2016) and EMI analysis

Figure 6: Twenty Largest Economies in the World, 1995 and 2015 by GDP at PPP

1995 Rank by GDP PPP	Country	1995 GDP PPP (in $ Bn)	2015 Rank by GDP PPP	Country	2015 GDP PPP (in $ Bn)
1	United States	7,664	1	China	19,524
2	Japan	2,875	2	United States	17,947
3	China	2,241	3	India	7,983
4	Germany	1,886	4	Japan	4,738
5	India	1,442	5	Germany	3,848
6	Brazil	1,307	6	Russia	3,580
7	Italy	1,247	7	Brazil	3,192
8	France	1,232	8	Indonesia	2,842
9	United Kingdo	1,223	9	United Kingdo	2,692
10	Indonesia	865	10	France	2,651
11	Russia	833	11	Mexico	2,194
12	Mexico	753	12	Italy	2,183
13	Canada	685	13	Korea	1,749
14	Spain	647	14	Saudi Arabia	1,685
15	South Korea	603	15	Spain	1,603
16	Saudi Arabia	486	16	Canada	1,589
17	Iran	481	17	Turkey	1,543
18	Thailand	407	18	Thailand	1,108
19	Australia	379	19	Nigeria	1,092
20	Netherlands	355	20	Australia	1,082

E20	G7	Other

Source: Based on data from The World Bank *(World Development Indicators) http*://databank.worldbank.org/data/home.aspx (accessed July 2016) and EMI analysis

Such changes reflect the strong growth rates registered by emerging economies over the past fifteen years (Table 3), with a number of them exceeding 5 percent, particularly between 2000 and 2015.

In comparison, the growth rates of G7 countries over the same period hovers around 1 to 2 percent, with rare exceptions (see Table 3). The 1995-2015 averages of G7 countries are all below those of countries in the E20, as shown in Figure 7. It is in this context—i.e a relatively long period of strong growth for many emerging economies—that the recent, and in some cases significant, decline in the growth rates of several emerging markets has to be appreciated, taking into account that such declines occur amid a general slowdown in the world economy. The decline has been particularly important in the past two year in Brazil, China, Nigeria and Russia.[16] At the same time, growth rates of about 6% or 7% (as estimated for China and India) and 5% (for Indonesia, Malaysia and Philippines) still compare quite well with levels barely or clearly below 2% in a number of major developed countries.

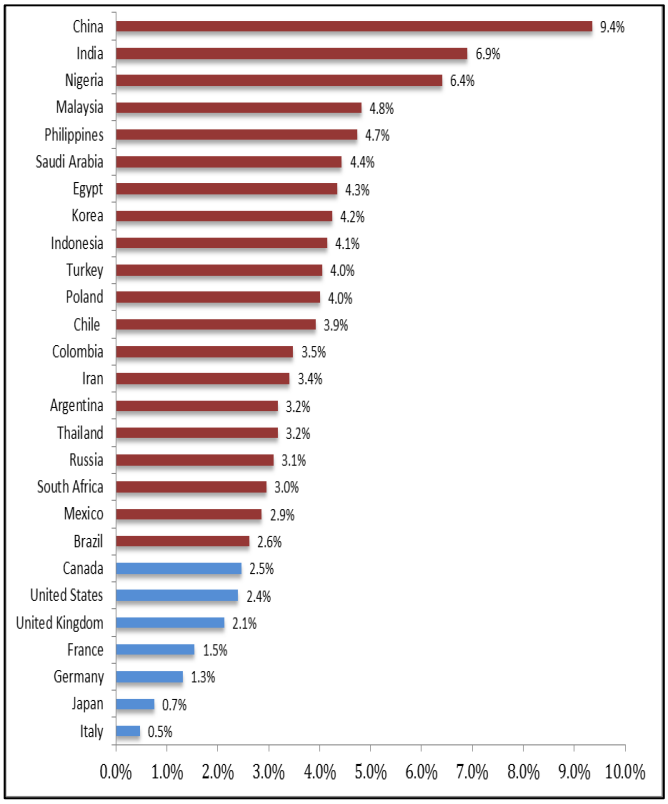
Vulnerability to external shocks and currency volatility has often characterized emerging markets, as reflected in the various crises that have affected them over the past twenty years: for instance, the Mexican crisis of 1994, the Asian financial crisis of 1997 and the various crises that have occurred in countries such as Russia, Argentina and Brazil since 2000. Whether the recent substantial decline in growth faced by some emerging economies in the E20 will turn into a more severe crisis remains to be seen. But emerging economies—that have achieved a prominent position in the world economy today—are likely to maintain their protagonism.

Table 3: E20 and G7 Countries – Growth Rates (Various Periods from 1995 to 2015)

	GDP growth rates*			
	1995-2000	2000-2005	2005-2010	2010-2015
E20				
Argentina	2,58%	1,99%	5,73%	2,46%
Brazil	2,09%	2,95%	4,47%	0,98%
Chile	4,16%	4,20%	3,49%	3,83%
China	8,61%	9,76%	11,26%	7,81%
Colombia	1,21%	3,62%	4,53%	4,59%
Egypt	5,20%	3,53%	6,18%	2,51%
India	6,08%	6,72%	8,08%	6,74%
Indonesia	0,70%	4,73%	5,74%	5,51%
Iran	3,50%	5,50%	4,89%	0,17%
Korea	5,19%	4,73%	4,11%	2,96%
Malaysia	4,79%	4,74%	4,48%	4,38%
Mexico	5,09%	1,64%	1,60%	2,84%
Nigeria	3,25%	10,59%	7,21%	4,70%
Philippines	3,56%	4,59%	4,93%	5,86%
Poland	5,41%	2,97%	4,72%	2,94%
Russia	1,62%	6,13%	3,54%	1,17%
Saudi Arabia	2,57%	4,90%	5,30%	5,00%
South Africa	2,79%	3,83%	3,10%	2,09%
Thailand	0,72%	5,44%	3,74%	2,85%
Turkey	3,36%	4,55%	3,19%	4,39%
G7				
Canada	4,02%	2,57%	1,14%	2,13%
France	2,91%	1,66%	0,77%	0,85%
Germany	1,92%	0,57%	1,23%	1,52%
Italy	2,00%	0,94%	-0,31%	0,72%
Japan	0,84%	1,20%	0,34%	0,61%
United Kingdom	3,21%	2,81%	0,39%	2,10%
United States	4,30%	2,53%	0,76%	2,03%

** Based on GDP, constant, in local currency*
Source: Authors' calculation, based on data from the World Bank (World Development Indicators)
http://databank.worldbank.org/data/home.aspx (accessed July 2016) and EMI analysis

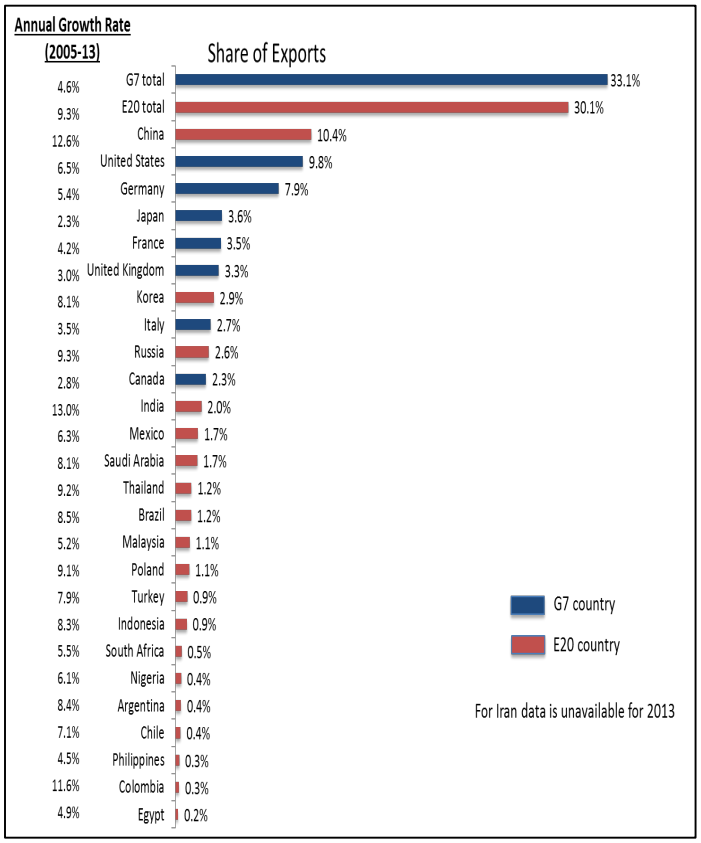
Figure 7: Growth Rates 1995-2015*



** Based on GDP, constant, in local currency*
Source: Authors' calculation, based on data from the World Bank (World Development Indicators)
http://databank.worldbank.org/data/home.aspx (accessed July 2016) and EMI analysis

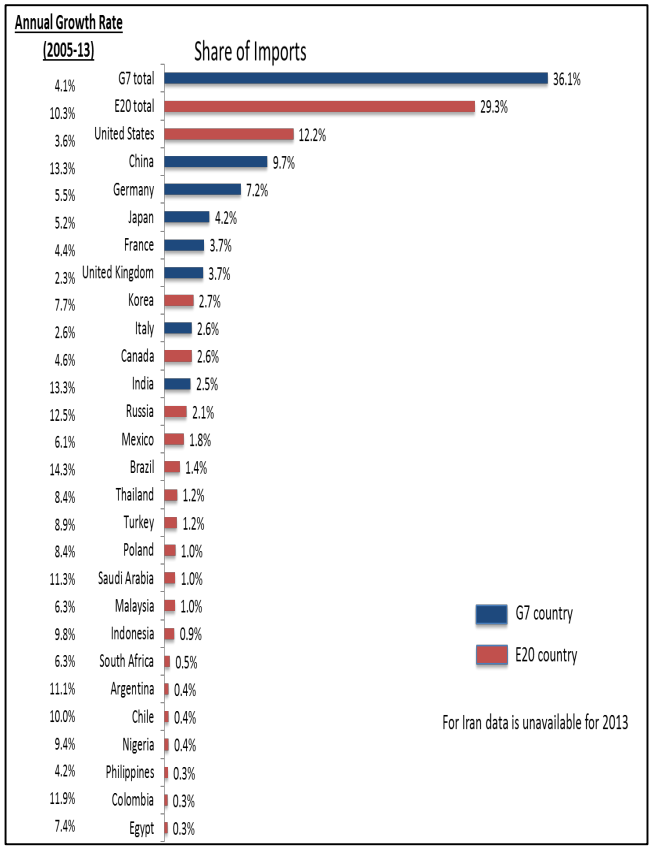
The share of E20 in world trade and global Foreign Direct Investment (FDI) further illustrates the increased weight of emerging markets in the world economy. In the past two decades, for instance, E20 countries increased their share in world exports from about 11% to 30% (Figure 8).[17] While for some of them commodities remain a key export, for others, such a trend reflects significant progress in manufacturing output and exports, including high-tech products. Of the fifteen largest countries by manufacturing added value, eight are E20 emerging countries.[18] In China, Korea, and Malaysia, high-tech products account for 26%, 27% and 43% of total manufacturing exports[19] respectively. A similar trend has taken place with imports: the E20 accounts today for about 29% of

Figure 8: Share of World Exports 2013



Source: Based on UNCTAD Statistics - International Trade (http://unctad.org/en/Pages/Statistics.aspx - accessed in May 2016)

Figure 9: Share of World Imports 2013



Source: Source: Based on UNCTAD Statistics - International Trade (http://unctad.org/en/Pages/Statistics.aspx - accessed in May 2016).

world imports, almost twice its share twenty years ago (Figure 9).

Meanwhile, the E20 have become major recipients of FDI (receiving about a third of FDI flows over the past five years) and are increasingly investing abroad. They are home to some of the largest multinational companies (see chapters 2 and 3).

The growth performance of the E20 and their increased integration in the world economy have been accompanied by the development of their technology and innovation capabilities, as well as by efforts to enhance the quality of human capital, particularly through education.

1.3 - Emerging Markets Move Ahead in Technology and Innovation

Technology and innovation are key drivers of growth and development. This has become even truer in the knowledge economy that has been developing over the past decades. For some two centuries, technology and innovation had been largely associated with the developed world. However, in recent decades emerging economies have increasingly paid attention to technology and innovation, increasing, for instance, their investment in R&D and developing specific national innovation policies. A number of them have also made substantial advancements in education and are beginning to lead innovation in some specific areas, especially those developed in response to the specific demands and needs of their population.

This change in the global technology and innovation landscape is reflected in global innovation indexes (as well as in some telling examples) and in more specific indicators on R&D and education expenses, patents or key infrastructure such as ICT. These are examined in the following sections.

A) Innovation: A Changing Geography

A number of indicators and examples suggest an evolution in the geography of global innovation, as does for instance the Global Innovation Index[20]—an indicator that assesses and compares the performances of 128 countries in innovation. Today, seven E20 countries are featured in the top 50 positions in the ranking of the Global Innovation Index.[21] The best ranked among them are at the heels of—or have even surpassed—some developed countries: Korea and China for example are ranked 11th and 25th respectively, compared to Netherlands (number 9), Germany (number 10), Canada (number 15), Japan (number 16), France (number 18) Spain (number 28) or Italy (number 29) to name a few[22]. In some industries (solar panels, aeronautics, medicine, genetic engineering, phyto pharmacy or super-computers), a number of emerging economies now attain leading positions.[23]

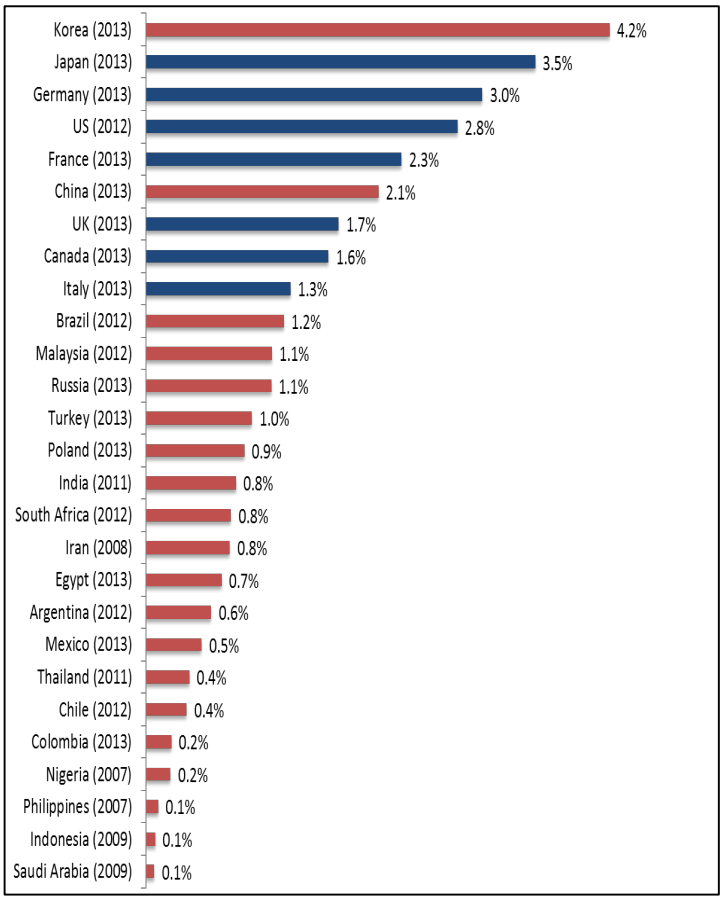
The increased participation of emerging economies in innovation has begun to change its nature. Indeed, in many cases, innovation in emerging economies has been driven by the need to respond to local needs that are often quite different from those prevailing in developed countries. Mobile banking—which in many countries enables a population deprived of banking services to access them—is one well-known example, but other IT based developments in agriculture or fishery [24] are no less important. Urban development—and its associated In such cases, innovations are not only new to the country – or the market; they are new to the world and likely to further disseminate: they contribute to a new geography of global innovation where emerging economies are becoming significant sources of innovation and technological development.[25]

B) Research and Development (R&D) Expenditure

Public and Private R&D expenditure as a share of GDP is the most common and widely available technology and innovation related indicators. While acknowledging its shortcomings, it provides a first indication of the R&D efforts made by countries.

Although there is still room for improvement as to the level of the R&D to GDP ratio, some emerging economies have significantly increased their R&D expenditures. Korea leads the way with an R&D

Figure 10: E20 & G7 R&D Expenditure (% GDP) in 2013 or latest available data



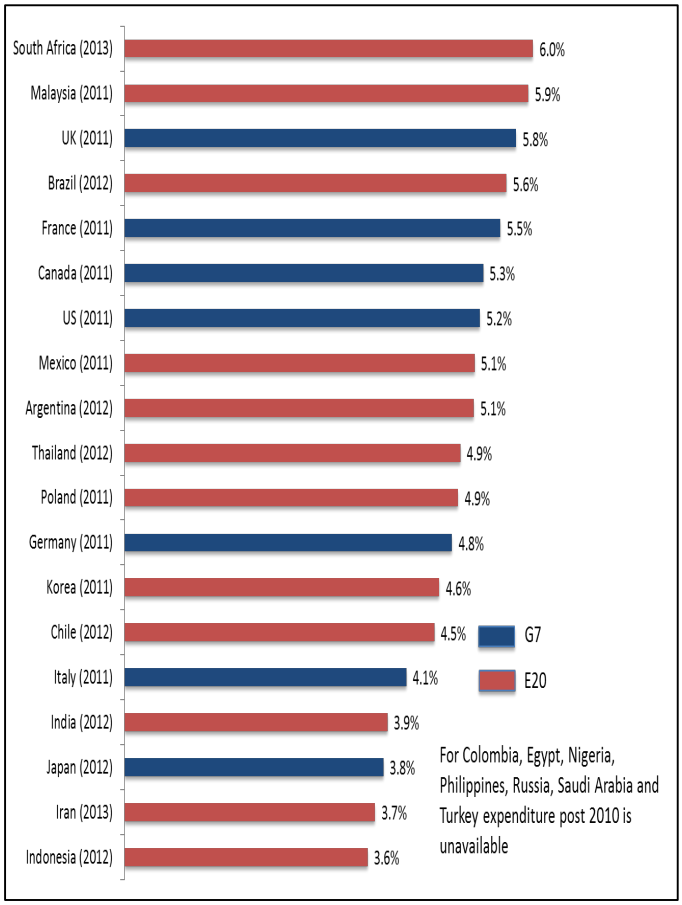
Source: Authors' analysis based on data from UNESCO statistics, UIS Stat,

intensity ratio of 4.15. China is worth noting: it has registered a significant rate of increase in its R&D expenditure (multiplying nearly five-fold in the course of a decade) and in its ratio to GDP (virtually doubling to 2 percent in a decade)[26]. China has become the country with the second largest R&D expenditures in the world. Malaysia and Turkey tripled their R&D expenditures (in constant prices), and doubled their GDP ratios in ten years.[27] Figure 10 provides the ratio of R&D expenditure to GDP for the E20 and G7 countries.

C) Expenditure on Education and Quality of Human Capital

Over the last couple of decades, a number of emerging markets have been striving to develop skills and talent through education policies, often centered on free education for all (at least at the primary level) and supported by relevant increases in public spending on education. Figure 11 compares expenditures on education in the E20 with those of some major developed countries.

Figure 11: Expenditure on Education (% GDP) 2013 (or latest available data)



Source: Authors' analysis based on data from World Bank (World Development Indicators)
http://databank.worldbank.org/data/home.aspx
(accessed July 2016)

A number of E20 economies have allocated a significant portion of their GDP towards education, including South Africa (6%), Malaysia (5.9%), Brazil (5.6%), Argentina and Mexico (5,1%). These percentages are higher or similar to those prevailing in G7 countries. Some heavily populated E20 countries, however, still find it difficult to surpass the 5% threshold, including India (3.8%), Indonesia (3.6%) and Pakistan (2.5%).

An educated workforce is a key ingredient for sound and sustainable growth. In a number of emerging markets, there has been a significant increase – sometimes a mass movement – in access to secondary education and university, reflecting the efforts made to enhance skills and talent,[28] as illustrated in Tables 4 and 5.[29]

D) Patents filings

Patents also provide an indication of the innovation capabilities of a country, reflecting to some extent the results of its efforts in innovation and technological development. While data in this area must be interpreted with caution, trends in the share of patents filed in the world suggest that countries in the E20 are beginning to catch up with regards to innovation.

As illustrated in Figure 12, there was a large gap between G7 and E20 countries in patent filing, with the former granting 61%, and the latter only 15% of the patents in 1994. By 2004, the gap between both groups of countries had begun to decrease.

It is however during the past decade that a real decline in this gap has taken place: in 2014, the shares of the E20 and the G7 in world patent filing

Table 4: E20 – Tertiary Education Enrollment Ratios –Trend (1994-2013)

Gross Enrollment Ratio-3°	1994	1999	2004	2009	2013
China	3.7	6.5	17.9	22.5	30.2
Brazil	..	..	..	..	..
India	..	..	11.0	16.1	23.9
Russia	44.5	51.9	70.6	75.4	78.0
Korea	45.0	73.9	91.0	98.0	97.0
Mexico	13.3	17.9	22.6	25.2	29.2
Indonesia	10.5	14.7	16.6	23.1	31.3
Turkey	20.0	23.5	30.6	46.2	79.0
Saudi Arabia	14.1	20.6	29.1	31.0	54.9
Nigeria	..	6.1	9.9	..	..
Poland	27.7	45.7	60.7	70.8	71.2
Argentina	36.8	48.0	65.2	70.5	80.0
Iran	..	19.1	21.8	36.4	57.8
Colombia	16.2	22.2	26.6	37.1	50.1
Thailand	..	32.7	41.9	48.8	51.4
South Africa	15.0	..	..	..	19.7
Malaysia	10.3	22.7	30.0	35.7	38.5
Egypt	..	30.7	28.5	29.9	30.3
Philippines	..	28.7	28.3	28.7	33.6
Chile	27.5	37.3	44.8	61.9	83.8
Canada	89.6	60.0	..	..	..
France	49.5	54.1	55.2	54.9	62.1
Germany	42.2	..	..	..	61.1
United Kingdom	42.8	60.2	59.4	58.2	56.9
Italy	40.1	48.3	61.8	66.8	63.5
Japan	38.7	46.6	53.6	57.7	62.4
United States	78.3	72.2	81.5	88.6	88.8
World	14.9	18.3	23.4	27.9	32.9

Source: Authors' analysis based on data from World Bank (World Development Indicators) http://databank.worldbank.org/data/home.aspx (accessed July 2016)

Table 5: E20 – Secondary Education Enrollment Ratios[31] –Trend (1994-2013)

Gross Enrollment Ratio-2°	1994	1999	2004	2009	2013
China	47.4	61.3	..	80.6	96.2
Brazil	..	..	..	..	..
India	45.8	43.2	51.6	59.8	68.9
Russia	90.7	92.4	85.3	85.0	98.8
Korea	99.0	99.1	90.2	98.2	99.4
Mexico	54.5	67.5	78.6	82.6	87.0
Indonesia	44.8	54.4	61.9	74.7	82.5
Turkey	58.6	70.8	86.2	79.9	114.6
Saudi Arabia	..	..	..	95.7	107.7
Nigeria	..	23.4	34.8	38.9	..
Poland	96.5	98.5	96.3	96.7	108.7
Argentina	68.7	84.9	85.2	87.5	106.3
Iran	68.2	78.0	76.3	82.8	86.6
Colombia	60.3	70.5	78.7	99.2	..
Thailand	42.6	..	66.9	80.9	86.2
South Africa	79.6	90.8	88.5	90.2	98.2
Malaysia	55.2	66.4	72.0	65.5	71.1
Egypt	74.7	79.1	80.8	68.8	86.0
Philippines	76.0	74.4	83.3	84.3	88.4
Chile	..	83.4	95.4	94.2	100.5
Canada	105.2	101.9	..	102.7	..
France	114.2	109.6	107.9	111.2	110.9
Germany	105.7	99.1	102.4	103.3	102.5
United Kingdom	102.7	101.2	104.6	99.4	124.4
Italy	87.6	91.6	98.0	100.7	102.4
Japan	101.0	101.2	101.2	100.9	101.9
United States	96.5	94.0	95.5	95.4	95.9
World	56.0	58.9	62.8	69.2	75.2

Source: Authors' analysis based on data from World Bank (World Development Indicators) http://databank.worldbank.org/data/home.aspx (accessed July 2016)

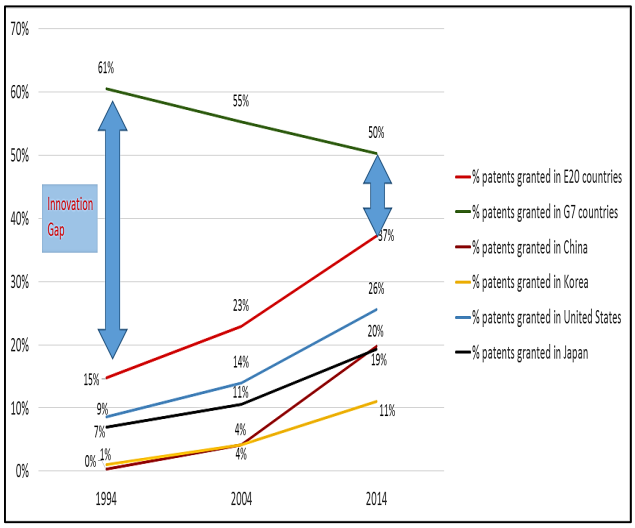
were 37% and 50%, respectively. China and Korea have led the trend, accounting for 20% and 11% of all patents, respectively. Other countries such as India, Russia, Mexico or Iran have also seen an increase in the number of patents filed, but the absolute numbers are still far below those of China and Korea (see Table 2 in Annex to this chapter). As to developed countries, the United States remains in the lead.

E) The Role of Information and Communication Technologies (ICT)

Information and Communication Technologies (ICT) have become a critical engine of growth.[30] They are key to the development and dissemination of technology and innovation, and to the leveraging of the benefits of international integration.

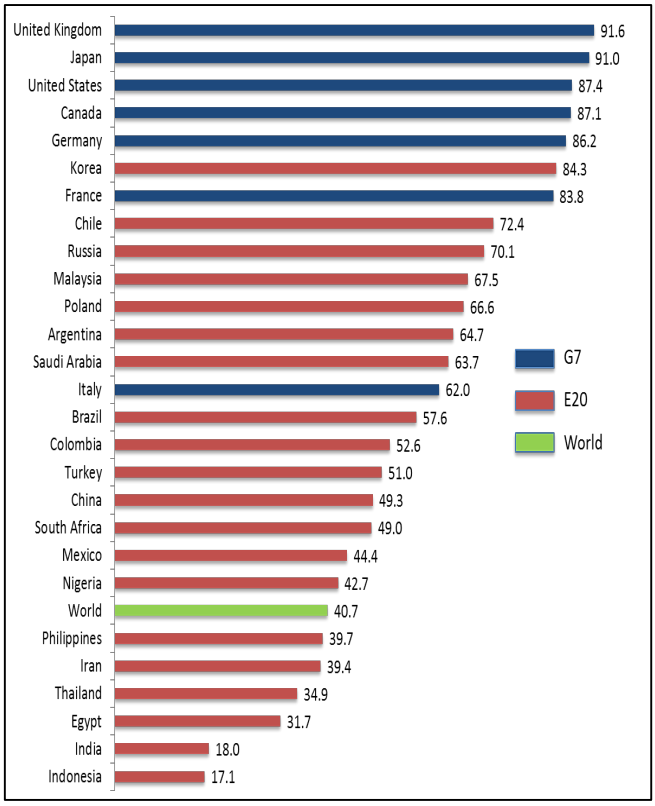
Interestingly, many emerging countries have more Internet and mobile technology users than the global average (Figures 13 and 14) and have been experiencing high penetration growth rates in the recent past. Although Internet penetration remains uneven, access to mobile telephones has been a major boost to development in the E20, including by facilitating greater and more productive entrepreneurial activity as well as the provision of basic public services like health and education to their populations.

Figure 12: Percentage of Patents Granted in E20 and G7 countries in 1994, 2004 and 2014



Source: Authors' analysis based on data from WIPO Statistics Database http://ipstats.wipo.int/ ipstatv2/index.htm?tab=patent - accessed July 2016).

Figure 13: Internet Penetration per 100 Inhabitants in G7 and E20 countries, 2014



Source: Authors' analysis based on data from the World Bank (World Development Indicators) (http://databank.worldbank.org/data/home.aspx -accessed July 2016)

Significant efforts are also underway to further develop broadband infrastructure, which is key to fully leverage ICT for economic growth and social development. Over the past few years, all E20 economies have adopted broadband plans and strategies.[32]

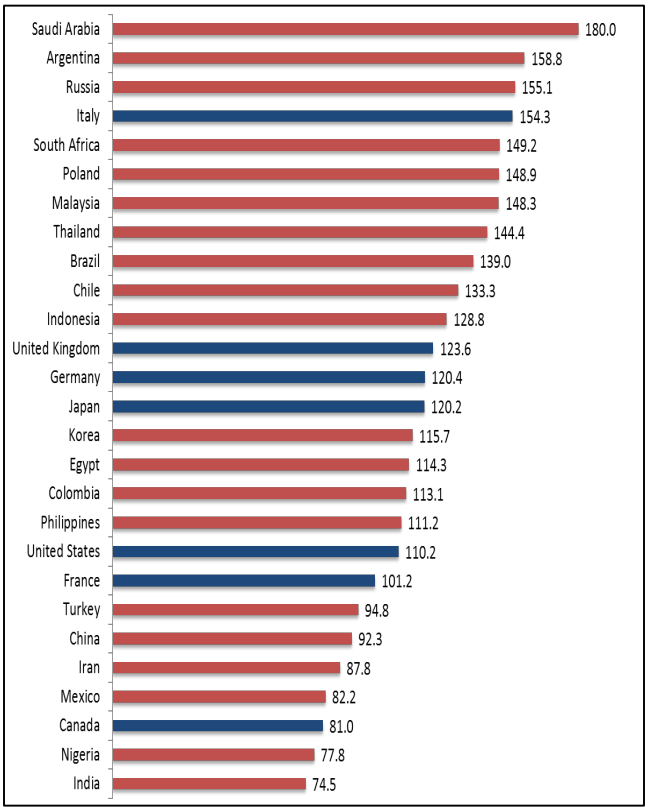
Broadband penetration in these economies has increased over the years and is higher than the world average, but there is still a gap compared with developed economies (Figure 15).

1.4 – Beyond economic power

Other developments, in the area of global governance and international cooperation in particular, are signs of the growing influence of emerging economies, enhancing their ability to exercise soft power on a global scale.

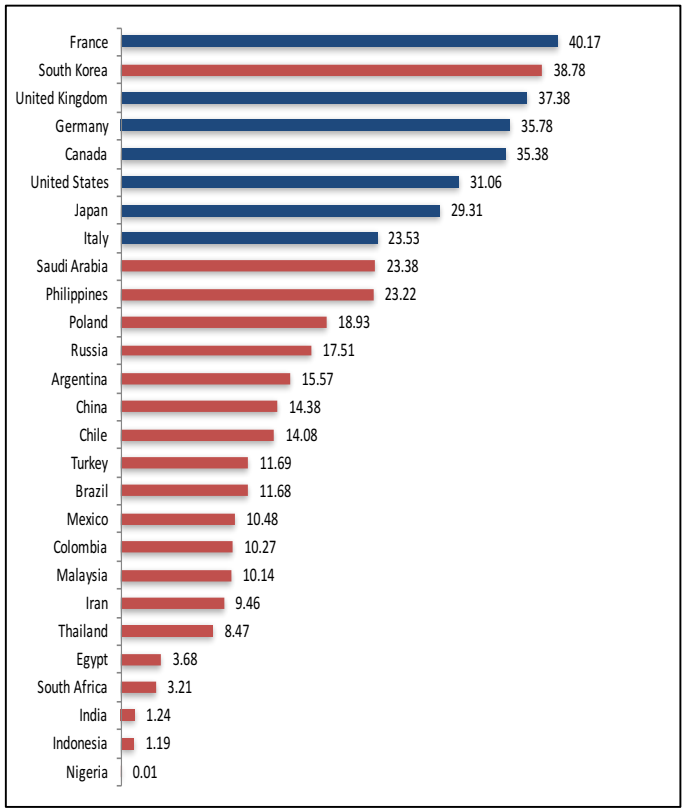
Already by the turn of the century, the creation of the G20 was a first recognition of the change taking place in the global economic and political landscape. Since then, with the BRICs summits in particular, some of the most prominent among the emerging economies have been aiming to expand multilateral cooperation. More recently, the establishment of new developmental institutions—such as the Bank of the South in 2009, the New Development Bank (NDB) in 2014[33] and the Asian Infrastructure Investment Bank (AIIB) in 2015—illustrate their aspiration to play a greater role on the world stage through development finance and cooperation (Table 6). In these institutions, the power structure is quite different from the one prevailing in post-WWII development organizations. For instance, China, followed by India and Russia, are the three largest contributors to the Asian Infrastructure Bank, which counts 57 members, including four G7 countries.[34] The "One Belt, One Road" Initiative proposed by China, which is designed for economic

Figure 14: Mobile Telephone Subscriptions per 100 Inhabitants in G7 and E20 Countries, 2014



Source: Authors' analysis based on data from the International Telecommunications Union Statistics (http://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx - accessed in May 2016).

Figure 15: Fixed Broadband per 100 Inhabitants in G7 and E20 Countries, 2014



Source: Authors' analysis based on data from the International Telecommunications Union Statistics (http://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx - accessed in May 2016).

cooperation and integration among countries around the original silk road and the 21st century maritime silk road, is another example of initiatives likely to expand China's role in global and regional affairs.[35] The development of these new multilateral institutions and initiatives may also well contribute to enhancing the role of the renminbi in international trade and investment.

The recent quota and governance reforms that have been approved by the IMF in January 2016 also reflects the new dynamics of the global economy – including the role of emerging economies. It strengthens their representation in the IMF's governance structure. As a result, emerging economies such as Brazil, China, India, and Russia are now among the 10 largest shareholders of the IMF.

The inclusion of the renminbi in the Special Drawing Rights (SDRs) currency basket – an exceptional development given that no new currency had been introduced in the basket since 1999[36] – is also particularly noteworthy.[37] Replacing part of the shares

Table 6: Selected Emerging Markets focused organizations

Organization	Launch year	Mission	Member nations
Bank of South	2009	Lend money to nations in the Americas for social programs and infrastructure.	Argentina, Brazil, Paraguay, Uruguay, Ecuador, Bolivia and Venezuela.
New Development Bank	2015	Foster greater financial and development cooperation among the BRICS nations	Brazil, Russia, India, China and South Africa
Asian Infrastructure Investment Bank	2014	Provide finance to infrastructure projects in the Asia Region	57 members from, Africa, Asia, Europe, Oceania, and Latin America

accounted for by the Euro, the UK pound and the Japanese yen in the IMF currency basket, the renminbi will be the third largest currency in that basket, after the US dollar and the Euro. The reserve currency status of the renminbi may well lead to significant changes in the international financial system, especially if the new reserve currency is seen as an alternative to the dollar in some parts of the world. While the full impact of this move on the currency and the global financial system is yet to be fully assessed,[38] it is clear that it has provided China with a new international status.

Why and How E20 counts and Will Continue to Count

Over the last two decades, emerging economies, considered here through the experience of the E20, have enjoyed a period of remarkably strong and steady growth. Recent 'slow downs' remain relative, even when they are significant, and sometimes combined with political turmoil (as in Brazil for example). The rise of emerging economies has deeply changed the global economy, and it will continue to do so.

In this chapter, we identified three main reasons for this. Firstly, because of their sheer scale and size, in terms of economy and demography, emerging economies have become key actors in the global economy: as a result of their closer integration into the world economy, what takes place in emerging economies now impacts the rest of the world, including the developed nations. A number of emerging economies have also become key regional powers. Secondly, many of the emerging economies have built their growth on a strong platform of fundamentals, driven increasingly by technology and innovation development. Thirdly, emergence is not only economic; soft power is also part of the picture. The rise of emerging economies on the economic front has been accompanied in recent years by a readiness – and a willingness – to assume a new role and increased responsibility in international governance and cooperation, made visible by the launch of new multilateral institutions as well as the new role of the renminbi as an IMF reserve currency, for instance.

Emerging economies are—and will remain—quite diverse. It would be unwise to expect that the growth rates achieved by some of them for several decades could be maintained in the future. There will be ups and downs, of a bigger or smaller order, depending on each economy. But overall the rise of these economies over the past decades has definitely challenged the status quo.

A new global landscape has crystallized before our eyes. Defining its precise contours would lie far beyond the scope of this study. However, evidence is now available that suggests how different tomorrow's global landscape will be. Such evidence can be gathered in particular through the remarkable rise of emerging economies as foreign investors, and the spectacular blossoming of some of their firms as world champions, as will be shown in the next chapter.

Annex to Chapter 1

Table 1 - Emerging Markets Classification – Selected Lists

Country	IMF*	UN (UNCTAD)	BRICS	Next Eleven	FTSE	MSCI
Argentina	X	X				
Bangladesh	X			X	X	X
Bahrain	X	X				
Brazil	X	X	X		X	X
Bulgaria	X					
Chile	X	X			X	X
China	X	X	X		X	X
China Hong Kong		X				
Colombia	X	X			X	X
Czech Republic		X			X	X
Croatia	X	X				
Ecuador		X				
Egypt	X	X		X	X	X
Korea	X	X		X		X
Kuwait	X	X				
Lebanon	X					
Lithuania	X					
Malaysia	X	X			X	X
Mauritius	X					
Mexico	X	X		X	X	X
Morocco	X					
Nigeria	X	X		X		
Oman	X	X				
Pakistan	X				X	X
Peru	X	X		X	X	X
Philippines	X	X		X	X	X
Poland	X	X			X	X
Qatar	X	X				X
Romania	X	X				
Russia	X	X	X		X	X
Saudi Arabia	X	X				
Serbia	X	X				
South Africa	X	X	X		X	X
Sri Lanka	X					
Taiwan		X			X	X
Thailand	X	X			X	X
Turkey	X	X		X	X	X
Ukraine	X	X				
United Arab Emirates	X	X			X	X
Uruguay		X				
Venezuela	X	X				
Vietnam				X		

* As indicated in its World Economic Outlook, the IMF classifies as "emerging market and developing economies" (152 economies) all those that are not classified as advanced economies, without distinguishing

specifically those that are emerging economies (IMF, WEO 2015). Its Global Financial Stability Report 2015 classifies as emerging economies the countries listed in this column (IMF, GFSR 2015).

Table 2: Number of Patents filed in G7 and E20 countries

E20 Patents	1994	2004	2014
China	3,883	49,360	233,228
Brazil	2,469	-	2,749
India	1,735	2,317	6,153
Russia	20,581	23,191	33,950
South Korea	11,683	49,068	129,786
Mexico	4,367	6,838	9,819
Indonesia	67	-	-
Turkey	1,102	979	1,276
Saudi Arabia	-	174	561
Nigeria	-	-	-
Poland	2,560	1,794	2,852
Argentina	2,114	840	1,360
Iran	253	1,454	3,060
Colombia	690	294	1,212
Thailand	431	716	1,286
South Africa	4,831	1,803	5,065
Malaysia	1,629	2,347	2,705
Egypt	568	325	415
Philippines	802	1,453	2,159
Chile	122	351	1,168
E20 total	59,887	143,304	438,804
% of world	14.8%	22.9%	37.3%
G 7 Patents	1994	2004	2014
Canada	11,641	13,077	23,749
France	16,872	11,836	11,889
Germany	16,915	16,661	15,030
United Kingdom	9,530	10,541	4,986
Italy	6,489	4,763	7,795
Japan	82,400	124,192	227,142
United States	101,676	164,291	300,678
G7 total	245,523	345,361	591,269
% of world	60.6%	55.2%	50.3%
World	405,355	625,100	1,176,600

Source: Authors' calculations based on data from WIPO statistics database http://ipstats.wipo.int/ipstatv2/ index.htm?tab=patent,, accessed July 2016).

Notes

[1] Van Agtmael first used this formulation when working for the International Finance Corporation (IFC) to set up a fund for investment in developing countries, reportedly to avoid the negative connotation of "Third World," as the fund was purportedly first named.
[2] O Neil, Jim. (2001). "Building Better Global Economic BRICs," *Goldman Sachs Global Economic Papers No. 66*.
[3] O'Neill, Jim, Dominic Wilson, Roopa Purushothaman and Anna Stupnytska. (2005). "How Solid Are the BRICs?," *Goldman Sachs, Global Economics Paper No. 134*.
[4] The acronym was developed by economists at the Economic Intelligence Unit (EIU).
[5] A number of other acronyms have appeared in recent years, mostly as marketing instruments of investment funds created by financial firms or entities.
[6] Iran appears only in one list in table 1 in Annex. It has been included in the E20 in view of its strong potential to play a significant role in the world economy given the geopolitical developments that have taken place since 2015. The UAE, mentioned in 4 lists in table 1 in Annex has not been included in spite of its level of GDP mostly due to the small size of its population. Taiwan, Province of China, mentioned in 3 lists has not been included either.
[7] As per UN Classification
[8] Of the ten most populated countries in the world today, seven are E20 countries (Brazil, China, India, Indonesia, Mexico, and Nigeria). Nigeria in particular is expected to see a major increase in its population which would make it the third largest country in the world by 2050. (UNDESA, *World population Prospects, 2015 Revision, Key Findings and Advance Tables*, ESA/P/WP.241)
[9] The G7, established in in 1985 to facilitate economic cooperation among the world's largest industrial nations, includes Canada, France, Germany, Great Britain, Italy, Japan, and the United States.
[10] This percentage falls to 13% if emerging economies that are OECD members (Chile, Korea, Mexico, Poland and Turkey) are excluded.
[11] Source: "UN Population Division." Available at http://www.un.org/en/development/desa/population/ (accessed March 2016). The youth is defined as the population aged 15 to 24 (Un Population Division). In addition in the E20, the population under 15 also accounts for a relatively significant part of the population (25 percent) compared with that in advanced economies such as the G7 countries (17 percent).
[12] The potentially active population, or working age population, is usually defined as those aged 15 to 64.
[13] Source : Data from United Nations, UNDESA, Population Divsion, *World Population Ageing 2015*, ST/ESA/SER.A/390, UN, New-York
[14] Source : Ibid.
[15] Kharas, Homi (2010), "The Emerging Middle Class in Developing Countries," *OECD Development Center Working Paper No 285.*
[16] In 2014 and 2015, the growth rates of the GDP (in national currency, at constant prices) were: for Brazil 0,1% and a negative 3,8% respectively; for Russia: 0,6% and a negative 3, 7%; for China: 7,3% and 6,9% and for Nigeria: 6,3% and 3,0%. (Source: IMF estimates ; World Economic Outlook Database; 2016 edition)
[17] Source: based on data from UNCTAD. Available at unctadstat.unctad.org (accessed in March 2016).
[18] UNIDO, Industrial Development Report 2016, Table 7.2. Available at http://www.unido.org/resources/publications/flagship-publications/industrial-development-report-series.html (accessed March 2016).
[19] Source: World Bank Indicators
[20] The Global Innovation Index (GII), published annually by INSEAD, Cornell University and WIPO, measures innovation across 128 economies (INSEAD, Cornell University, and WIPO, Global Innovation Index Report 2016). The GII is a composite index combining some 82 variables distributed across seven pillars (institutions; human

capital and research; infrastructure; market sophistication; business sophistication; knowledge and technology output and creative outputs).

[21] Based on data from the Global Innovation Index Report 2016, ibid.

[22]Lanvin, Bruno and Anne Miroux (2016). "Les Politiques D'Innovation Dans Les Économies Émergentes et en Développement : Quels Enjeux et Quelles Perspectives à L'Échelle Mondiale?", *Geoéconomie No 80,* mai-juin-juillet 2016, Institut Choiseul, Paris, pp 127-145.

[23] Among the recent examples, in 2016, China became the country with the most super computers in the world (167 super computers among the top 500), including the fastest one which was developed using only Chinese-designed proceesors.

[24] M-Farm in Kenya or Fisher Friends in India for example.

[25] Lanvin, Bruno and Anne Miroux (2016). "Les Politiques D'Innovation Dans Les Économies Émergentes et en Développement : Quels Enjeux et Quelles Perspectives à L'échelle Mondiale?", Ibid.

[26] Based on data from UNESCO statistics, UIS Stat, R&D expenditures for 2013 and 2003 (in PPP, in constant price), http://data.uis.unesco.org/ (accessed in july 2016)

[27] Based on data from UNESCO statistics, UIS Stat, R&D expenditures for 2013 and 2003 (in PPP, in constant price), http://data.uis.unesco.org/ (accessed in july 2016)

[28] It is true, though, that the outcome in terms of quality is not always commensurate with the policy efforts made, as reflected for instance in the PISA scores of some emerging markets or the global university rankings. While for instance the PISA scores of countries such as China, Korea, and Poland are superior to those of the OECD average, those of countries such
as Brazil, Indonesia, Malaysia, Mexico or Thailand are clearly below, sometimes in spite of the high education expenditures ratio (as in the case of Brazil). That being said, it is also worth noting that countries such as France, the UK or the United States are either slightly below or barely superior to the OECD average (based on PISA 2012 results, OCDE, http://www.oecd.org/pisa/pisaproducts/pisa2012database-downloadabledata.htm)

[29] Gross enrolment ratios were used for Tables 4 and 5. Net secondary enrolment ratios are not available for recent years for many countries. For tertiary education, net enrollment ratios are not available.

[30] It has been estimated for instance that, for a 10% increase in broadband penetration, there is a 1,3% increase in GDP (Qiang and Rossoto, 2009).

[31] "Gross" enrollment includes students of all ages. In other words, it includes students whose age exceeds the official age group (e.g. repeaters). Thus, the total enrollment can exceed the population of the age group that officially corresponds to the level of education - amounting to ratios greater than 100 percent."

[32] Source: "Annex A." *ITU Broadband Commission Report 2015.* Available at http://www.broadbandcommission.org/documents/r eports/bb-annualreport2015.pdf (accessed August 2016).

[33] The agreement on the New Development Bank (NDB) was signed at the 6th BRICs Summit in Brazil in 2014. Its headquarters opened in Shanghai in March 2016.

[34] The initiative on the Asian Infrasctrue Bank was launched in 2014. The Agreement was signed in 2015 by the initial members, and joined by others later. The Bank opened in January 2016.

[35] The One Belt, One Road initiative, launched in 2013, aims to foster integration and cooperation (by building infrastructure, developing cultural exchange, and increasing trade) among countries in Asia, Middle east and North Africa along two axes: the Silk Road Economic Belt (essentially the original silk road) and the 21st Century Maritime Silk Road.
On the intiative, see for instance: D. Dollar, "China's rise as a regional and global power: The AIIB and the 'one belt, one road'" Available at http://www.brookings.edu/research/papers/2015/07/china-regional-global-power-dollar and Scott Kennedy and David Parker, "Building China's 'One belt, One Road'," Center for Strategic and International Studies (CSIS). April 2015. Available at https://www.csis.org/analysis/building-china's-"one-belt-one-road"

[36] The Remimbi will join the US$, the euro, the UK pound and the Japanese Yen. The euro was the latest currency to join the basket in 1999.

[37] The move "is an important milestone in the integration of the Chinese economy into the global financial

system," IMF Managing Director Christine Lagarde said. IMF Press Release No. 15/540. November 30, 2015.
[38] Some observers however have pointed to the new uncertainty this could introduce in China's financial and economic system. Keith Bradsher (November, 30 2015). "China's Renminbi Is Approved by I.M.F. as a Main World Currency." *New York Times*,Available at
http://www.nytimes.com/2015/12/01/business/international/china-renminbi-reserve-currency.html?_r=0

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Kharas, Homi (2010). "The Emerging Middle Class in Developing Countries." *OECD Development Center Working Paper,* No 285.

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Keith Bradsher (November 30, 2015). "China's Renminbi Is Approved by I.M.F. as a Main World Currency,"*New York Times.* Available at http://www.nytimes.com/2015/12/01/business/intern ational/china-renminbi-reserve-currency.html?_r=0

O'Neil Jim. "Building Better Global Economic BRICs." *Goldman Sachs Global Economic Papers,* No. 66.

O'Neill, Jim, Dominic Wilson, Roopa Purushothaman and Anna Stupnytska (2005), "How solid are the BRICs?"*Goldman Sachs Global Economics Paper*, No. 134.

Qiang, Christine. Z., and Carlo M. Rossotto (2009). "Economic Impacts of Broadband." In *Information and Communications for Development 2009: Extending Reach and Increasing Impact*.Washington, DC: World Bank

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United Nations (2015), UNDESA, *World population Prospects, 2015 Revision, Key Findings and Advance Tables*, ESA/P/WP.241, UN, New-York

Chapter 2

Emerging Economies and the New Investment Landscape

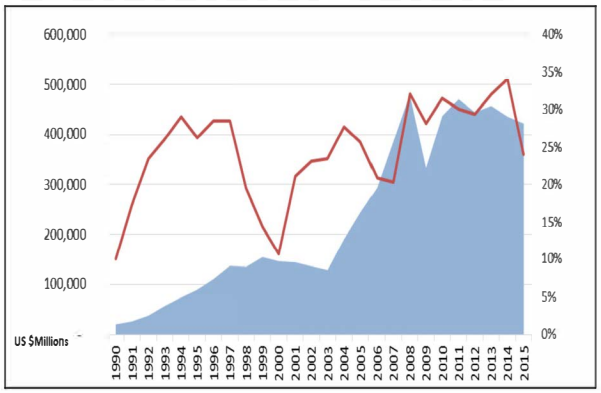
Emerging economies have become a driving force behind both inward and outward Foreign Direct Investment (FDI) around the world. Today, they not only feature among the major recipients of FDI flows, they have also become significant investors in recent years. Indeed, the wave of outward FDI (OFDI) from emerging economies has been quite remarkable both in size and scope, especially since the Global Financial Crisis. This chapter focuses on how deeply these new trends in OFDI have affected the global FDI landscape.

2.1 - Emerging Markets as Recipients and Sources of Foreign Direct Investment

The FDI landscape has changed considerably in the past twenty years with the increasing presence of emerging economies and the relative shift away from developed countries. Until 1980, developed countries received about 80% of world FDI inflows[1]; by 2014-2015, that share had fallen to 48% on average. Likewise, their share in FDI outflows has declined from about 95% to 64% between 1980 and 2014-2015.[2]

The E20 emerging economies[3] are emblematic of the changes throughout this period. The E20 contributed to the increase in global inward FDI since the 1990s, which became even more pronounced since the early 2000s in what is now referred to as the Golden Age of Emerging Markets, a period marked by a significant surge in FDI inflows (Figure 1).

Figure 1: Inward FDI Flows to E20
(US $ millions and share in global FDI flows)



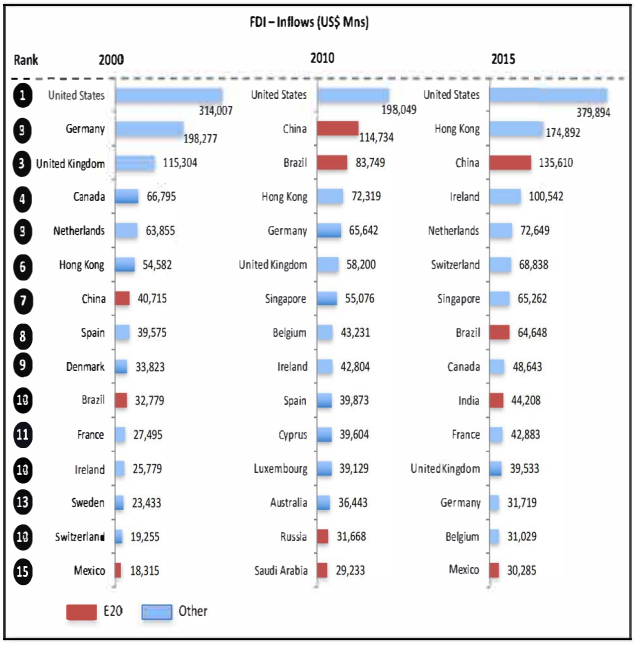
Source: Authors' analysis based on data from UNCTADstats. Available at: http://unctadstat.unctad.org (accessed August 2016) and UNCTAD, World Investment Report (WIR) 2016. Annex Table 1, available at http://unctad.org/en/Pages/DIAE/World%20Investment%20Report/Annex-Tables.aspx (accessed August 2016)

In turn, emerging markets enhanced their position as significant FDI recipients, accounting today for about a third of world FDI inflows on average, compared to 11% in 2000. By 2015, the E20 received an estimated US$423 billion in FDI flows (almost twice what they received 10 years earlier), with six of the E20 countries (China, Brazil, India, Chile, Mexico and Indonesia) among the top 15 FDI recipients in the world today, compared to only two (Brazil and China) in 2000 (Figure 2). In 2014, China was the largest recipient of FDI flows for the first time ever[4]. The trend in the inward FDI stock of the E20, which has increased by 500% since 2000, reflects this surge in FDI inflows. Today the stocks of three E20 countries (China, Brazil and Russia) are among the 15 largest in the world (Figure 3).

This upward trend was largely driven by FDI to Asia: for instance, the total FDI flows received over the past two decades by the Asian countries of the E20 were almost twice as large as those received by the E20 Latin American countries.

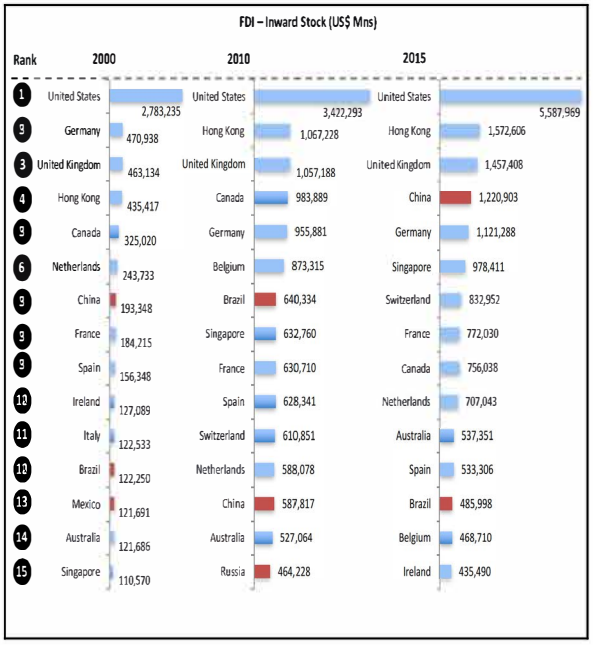
Since the turn of the century, what is perhaps even more striking than the upward trajectory in FDI inflows has been the remarkable increase in Outward Foreign Direct Investment (OFDI) from developing and emerging economies, especially the E20 (see Figure 4).

Figure 2: Top 15 Economies by FDI Inflows
2000-2015 (US$ Millions)



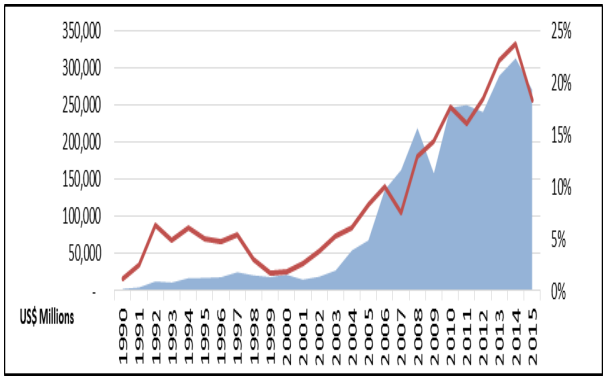
Note: Excludes financial centers in the Caribbean
Source: Authors' analysis based on data from UNCTAD, World Investment Report (WIR) 2016. Annex Table 1, op. cit.

Figure 3: Top 15 Economies by FDI –
Inward Stock 2000-2015 (US$ Millions)



Note: Excludes financial centers in the Caribbean.
Source: Authors' analysis based on data from UNCTAD, World Investment Report (WIR) 2016, Annex Table 1, Ibid.

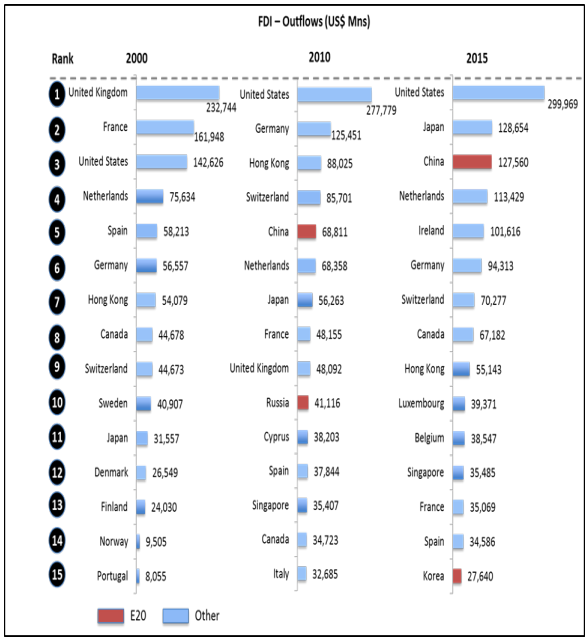
Figure 4: Outward FDI Flows from E20 Countries, 1990-2015
(US $ Millions and share of global FDI flows)



Note: Red line - Share in Global OFDI flows.
Source: Authors' analysis based on data from UNCTAD, World Investment Report (WIR) 2016. Annex Table 1, op.cit.

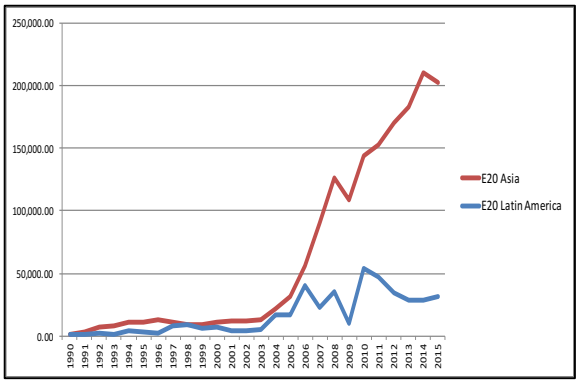
This is not the first wave of OFDI from such economies. There were, for instance, two relatively small waves of such OFDI (mostly from Latin America) during the mid-1970s and in the mid-to-late 1980s,[5] as well as a third one of a larger magnitude around the mid-1990s. But the new millennium marks by far the most significant wave, with the advent of emerging markets as key players on the world OFDI stage[6]. For instance, E20 economies account today for 20% of world OFDI flows, against about 2% at the turn of the century (Figure 4).[7] In 2015, two of the E20 countries were among the top 15 investors in the world, with China in the third top position (see Figure 5).

Figure 5: Top 15 Economies by OFDI – Outflows 2000-2015 (US$ Millions)



Note: Excludes financial centers in the Caribbean
Source: Authors' analysis based on data from UNCTAD, World Investment Report (WIR) 2016. Annex Table 1, op. cit.

Figure 6: Outward FDI Flows – E20 Latin American and Asian Countries 1995-2015 (US$ Millions)

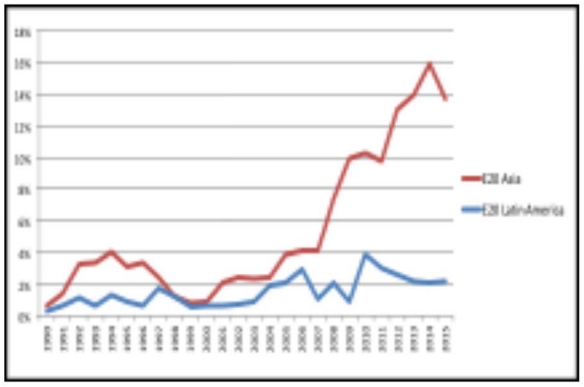


Source: Authors' analysis based on data from UNCTAD, World Investment Report (WIR) 2016, Annex Table 1, op. cit.

There are however regional differences in OFDI trends among the E20 group. For instance, outward FDI from the E20 African countries, which reached its peak level of 10 US$ billion in 2014, is in no way comparable to the rest of the group. In addition, between Asian and Latin American members, OFDI trends display marked differences. While Latin America was leading OFDI from emerging economies during most of the 1970s, it has now been largely outpaced by Asia. Particularly striking has been the evolution over the past 15 years. Indeed, while both E20 Asian and Latin American countries began an upward trend in the early 2000s, Asia began to stride ahead in 2003 (Figures 6 and 7).

After the 2007 Global Financial Crisis, the evolution of both groups clearly diverged: while E20 Asian countries significantly expanded their investment abroad, Latin America did not (Figures 6 and 7). The crisis was a turning point in this respect.

Figure 7: Share in World FDI Outflows: E20 Latin American and Asian Countries 1990-2015

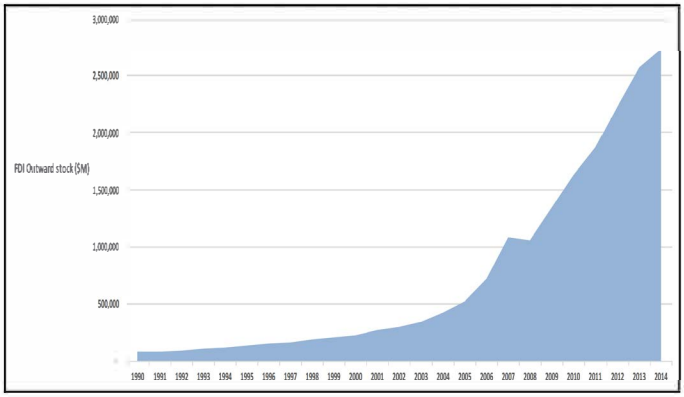


Source: Authors' analysis based on data from UNCTAD, World Investment Report (WIR) 2016, Annex Table 1, op.

At the time, emerging economies—especially E20 Asian countries—proved to be more resilient than developed ones and to be better positioned to capitalize on investment opportunities. During the same period, E20 Latin American countries, which also benefited from further growth, saw their OFDI increase moderately and then decline. Today, their OFDI accounts for about 2% of global FDI outflow (Figure 7), with Brazil even experiencing negative FDI outflows on several occasions since 2009 (see section below)[8].

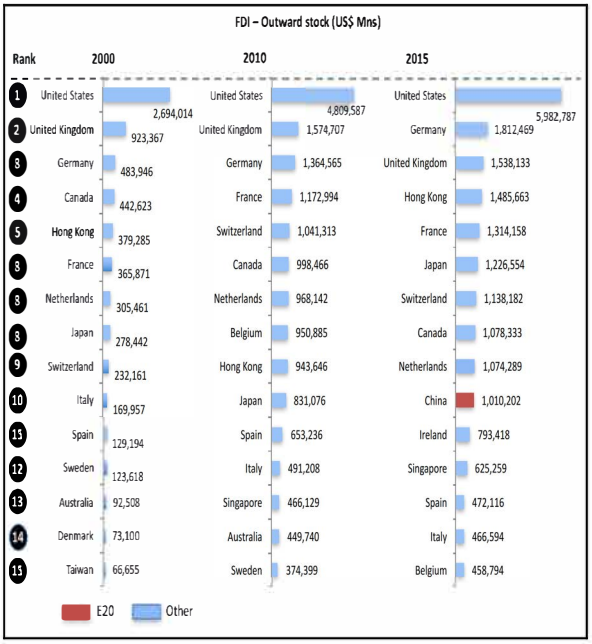
In all, the stock of OFDI from E20 emerging economies almost quadrupled over the past 15 years (Figure 8). With an estimated US $2.8 trillion in 2015, it accounts for about 11% of the world OFDI stock, compared to about 3% in 2000. Here, again, the Asian

Figure 8: E20, OFDI Stock 1980-2014 (US$ Millions and Share of Global OFDI stock)



Source: Authors' analysis based on data from UNCTAD, World Investment Report (WIR) 2016, Annex Table 1, op. cit.

Figure 9: Top 15 Economies by OFDI - Stock (US$ Millions)



Note: Excludes financial centers in the Caribbean
Source: Authors' analysis based on data from UNCTAD, World Investment Report (WIR) 2016, Annex Table 1, op. cit.

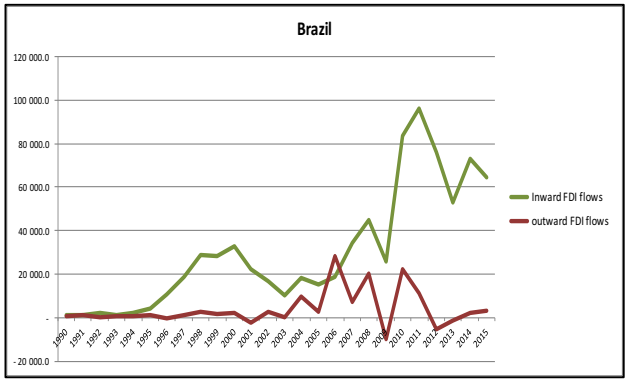
members of the E20 led the trend, with countries such as China, Korea and Malaysia altogether responsible for 42% of the increase in the E20 OFDI stock over the period. In spite of the significant growth registered, of the E20, only China features among the 15 countries with the largest FDI stock in the world (Figure 9). This is not surprising: indeed, many of the E20 countries had hardly any overseas investment fifteen years ago.

One of the characteristics of OFDI from emerging economies is that, initially, it was mostly South-South [9] and intra-regional. It has remained largely so, though in more recent years emerging multinationals have ventured beyond their traditional frontiers, including into developed markets as illustrated in the sections below.

2.2 - Selected E20 Countries: A Snapshot of Outward FDI (Brazil, China, and Korea)

While emerging economies have been very active in attracting inward FDI—often perceived as a key source of finance and technology for growth and

Figure 10: Brazil FDI Flows, 1990-2015 (US$ Millions)



Source: Authors' analysis based on data from UNCTAD, World Investment Report (WIR) 2016, Annex Table 1, op. cit.

development—they have generally been much more cautious in promoting OFDI. Still, as illustrated with the E20, emerging economies have positioned themselves as significant sources of FDI and the pace of change has been very fast. This can be appreciated globally, as has been done in preceding sections. The examination of trends at the country level enables a deeper understanding of the phenomenon. The following section focuses on the outward FDI (following a brief presentation of inward FDI) of three E20 countries: Brazil - that has the largest OFDI stock of Latin America, and China and Korea, the largest outward investors from Asia among the E20. OFDI from other E20 economies will be examined in future issues of the Emerging Market Multinationals Report.

A) Brazil

Brazil has a long history of inward FDI, dating back to the 19th century. When multinationals began to truly expand their activities in developing countries, in the 1970s, Brazil was one of their prime destinations. It has since then remained a key destination, even during the slower growth period of the 1980s. Inward FDI increased dramatically in the mid-1990s until the turn of the century, when it slightly decelerated. FDI resumed an upward trajectory in the mid-2000s; more recently (since 2011) these flows have slowed down (Figure 10), but this did not prevent Brazil from retaining its position as one of the top FDI recipients in the world (around 5th or 6th). Today, its FDI inflows are twice as large as they were in 2000. Attracted by a large domestic and regional market, and boosted by the privatization program of the 1980s and 1990s and a relatively liberal regime, inward FDI has played a significant role in Brazil's industrialization over the past decades.

The main source of FDI into Brazil has traditionally been developed economies, in particular the USA, and EU countries (such as Spain, the Netherlands, and Luxembourg). However, the expansion of Chinese investment in Brazil in recent years is worth noting as it illustrates the global expansion strategy of Chinese multinationals. In 2010, China became Brazil's largest source of FDI.[10]

Brazilian Outward FDI: No Longer in a Prominent Position

Compared to inward FDI, Brazil's outward flows have always been of a much smaller magnitude and have at times fallen into negative territory (Figure 10). Brazil is still today, by far, a net FDI recipient. That being said, Brazil has long been one of the major investors among emerging economies—the first one, in fact, during the early years of OFDI expansion from such economies. Over the years, Brazil has lost such a prominent position as shown below:

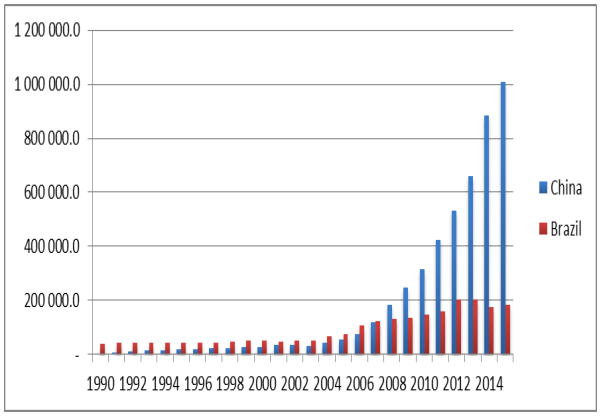
Brazil was the pioneer in investment from emerging economies, spearheading the wave of the so-called "Third World Multinationals" during the 1970s. In 1980, it had by far the largest stock of OFDI from emerging economies.[11] Throughout the 1980s, i.e. during what many refer to as the "lost decade" of Latin America, marked by the debt crisis and macroeconomic instability, Brazil's outward direct investment lost momentum.

In the mid-1990s, Brazil's OFDI flows resumed an upward trend, which lasted until the mid-2000s; the latter in particular was a period of accelerated growth (Figure 10). At the time, Brazil was the largest investor in Latin America. But its increase in OFDI flows did not fully measure up to what was taking place in other emerging economies in Asia. In the early 2000s, the amount of FDI invested abroad by Brazil began to be outpaced by that of Asian countries. Indeed, Brazilian multinationals did not take advantage of the favorable economic environment and of the commodity boom for expanding abroad, at least not to the same extent as Asian multinationals.

Since 2006, Brazil's OFDI has clearly decelerated. Its OFDI flows have in fact been negative on three occasions since 2009.[12] While this trend is partly explained by the evolution of intracompany loans between Brazilian firms and their subsidiaries abroad, the fact that equity capital investment flows stagnated during the period suggests that Brazilian firms did not ratchet up their foreign expansion.[13]

By 2008, Brazil had lost its lead position in term of OFDI stock among emerging economies and was outpaced by several emerging economies in term of outflows. Its evolution in its outward investment is all the more striking if one considers the weight of Brazil in the global economy: Brazil is the 9th largest economy in the world and the 3rd among emerging economies[14] (see chapter 1). It is emblematic of the trend that took place in terms of Latin American OFDI throughout the past decade, which either increased only modestly or even declined, as was the case during some years for other Latin American countries such as Argentina or Mexico.

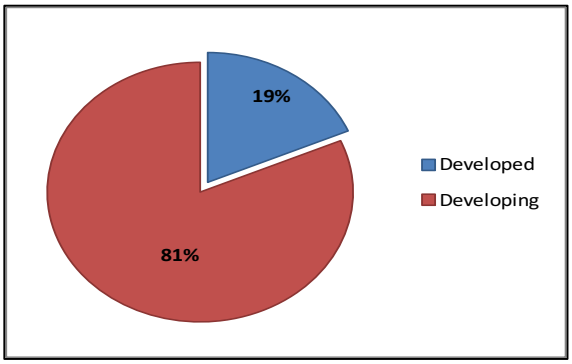
Figure 11: OFDI Stock, 1990-2015 – Brazil, China



Source: Authors' analysis based on data from UNCTAD, World Investment Report (WIR) 2016, Annex Table 1, op. cit.

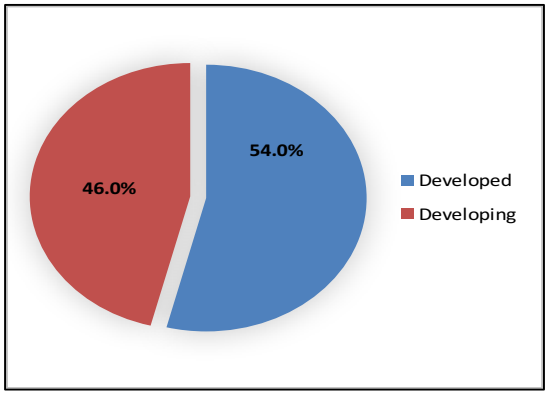
The geographical distribution of Brazilian Outward FDI has evolved substantially since 2000, with an increasing share of its OFDI stock invested in developed markets, as shown below.

Figure 12a: Brazil OFDI Stock, 2001



Source Authors' analysis based on data from UNCTAD FDI/TNC Database, Bilateral FDI Statistics

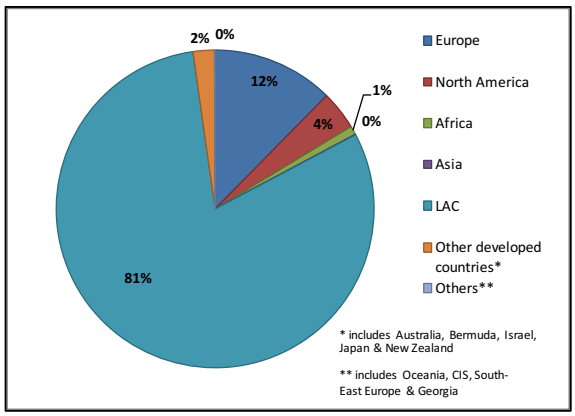
Figure 12b: Brazil OFDI Stock, 2014



Source: Authors' analysis based on data from Banco Central do Brasil.

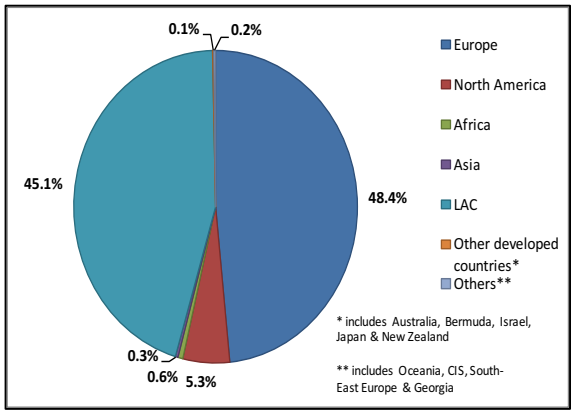
Brazilian outward investment had long been predominantly in developing economies, especially its natural market in Latin America and the Caribbean[15] (Figure 13.a). It was largely concentrated in the

Figure 13a: OFDI Stock 2001



Source: Authors' analysis based on data from UNCTAD FDI/TNC Database, Bilateral FDI Statistics

Figure 13b: OFDI Stock by region, 2014



Source: Authors' analysis based on data from Banco Central do Brasil

Caribbean financial centers that accounted for about two thirds of Brazil's total OFDI stock in 2001 for instance. This high concentration, partly explained by the high level of regulations and taxes prevailing in Brazil, lasted until the mid-2000s. Since then, the relative importance of the Caribbean financial centershas been declining, following a significant expansion of Brazil's outward investment in developed markets. Today about 45% of Brazil's OFDI stock is invested in Latin America and the Caribbean (Figure 13.b), out of which about 36% is directed to the Caribbean alone.

Quite early in their internationalization process, Brazilian firms began targeting developed economies, especially the USA and a number of EU countries. As a result, by 2001, such economies already accounted for about 19% of the stock of Brazilian direct investment abroad. The importance of Europe as a destination for Brazilian investment further increased over the past decade: it became the largest recipient of Brazil's OFDI, accounting for 48% of its total OFDI stock, a significant increase over the past decade (Figures 13.a and 13.b). Altogether an estimated 54% of Brazil's OFDI is in developed countries today, a very high proportion by all standards (Figure 12.b).

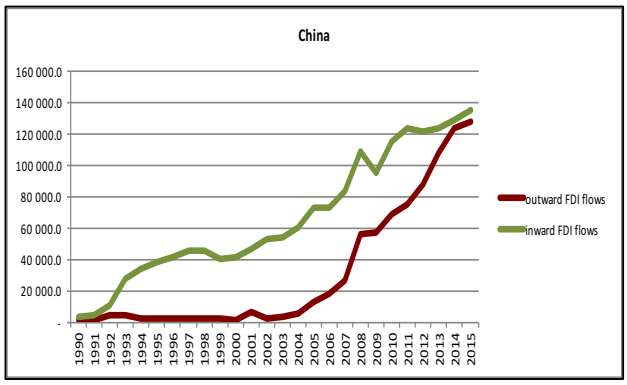
Beyond Europe, Latin America and North America, no other region receives significant Brazilian investment. It is interesting to note that Brazil has hardly any investment in Asia: indeed the region accounts for the smallest share of Brazil's total OFDI stock (0,3% or less than 1 US$ billion). While there is significant Asian investment in Brazil (and Latin America in general), as the case of China and Korea examined later illustrates, the reverse is not true.

Though their importance has been declining, natural resources and natural-resource-based manufacturing still account for a large share of Brazilian FDI stock abroad (one third in 2014), with agriculture, fishing and mining alone representing about 20 % of such stock.[16] Services account for half of it, partly reflecting the share of Caribbean financial centers in Brazil's investment abroad.

OFDI policies: Government Support, and its Limitations

As was the case for most Latin America firms, outward investment by Brazilian firms was driven primarily by business considerations. Brazilian companies, faced with increased competition at home brought about by liberalization, deregulation, privatization and other reforms of the 1990s, needed to upgrade, restructure and expand their operations. Overseas investment was a way to achieve it; in some cases, it was a matter of survival (Casanova 2009). This spurred the OFDI increase of the 1990s and mid-2000s. Moreover, macroeconomic considerations such as currency volatility and access to capital have been a non-

Figure 14: China FDI flows, 1990-2015
(US $ millions)



Source: Authors' analysis based on data from UNCTAD, World Investment Report (WIR) 2016, Annex Table 1, op. cit.

negligible motivation in the past fifteen years for Brazilian firms to invest abroad.

Compared to the policies in China or Korea, Brazil's support of OFDI has been much more subdued and much less direct. However, the significant role that State and industrial development policies played in the emergence of Brazilian multinationals during the late 1990s and 2000s has to be recognized. Such policies encouraged the creation of national champions that would later become big international players[17] (E. Stal & A. Cuervo-Cazurra, 2011). For instance, BNDES provided financial support for domestic mergers, thereby facilitating the proliferation of champions and indirectly promoting the internationalization of Brazilian firms. BNDES also provided direct financing to facilitate the overseas expansion of a number of Brazilian companies. In this respect, Brazil is unique in Latin America as hardly any other country in the region provided comparable support for OFDI. In addition, over the years, Brazil simplified regulations on foreign exchange and capital outflows and removed some controls and restrictions.[18]

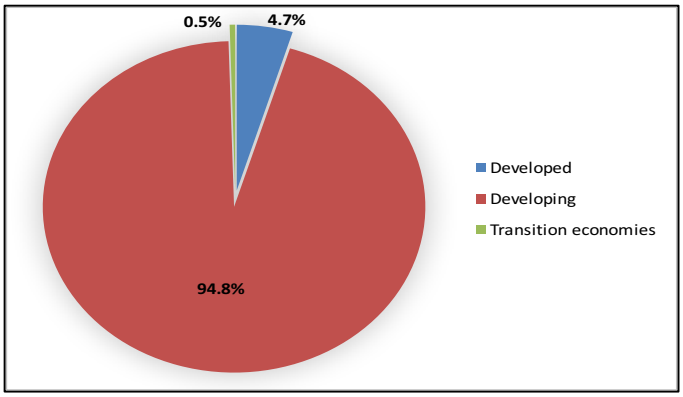
In 2011, as the economy was slowing down, a new industrial policy was launched -"Bigger Brazil" (*Plano Maior*, in Portuguese) – which aimed to boost Brazil's competitiveness. While the previous industrial policy had set the goal of creating Brazilian firms that would become global leaders and facilitated their outward expansion, such a goal does not feature any longer in the new policy which includes neither specific objectives nor any further support measures on OFDI,[19] suggesting a change in government support for OFDI.

The lack of government support (as compared to China and Korea, see below) partly explains the more timid internationalization of Brazilian, and Latin American companies more generally, compared to those from China and Korea (see more in Chapter 3).

B) China

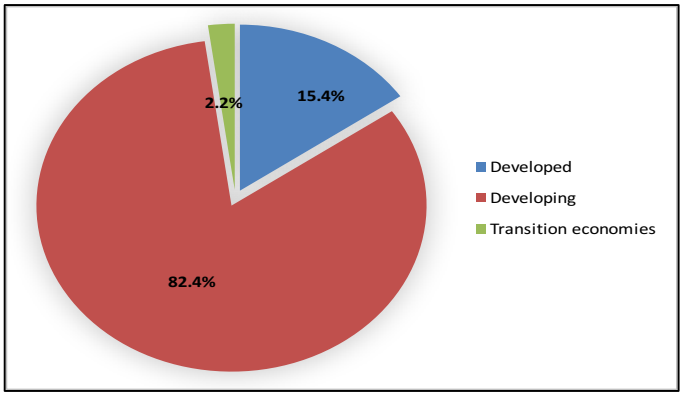
A closed economy until the late 1970s, China began opening to foreign investors in 1979[20] and followed a gradual approach to market liberalization, leading to a rise in its FDI inward flows in the early 1900s. Over the years, further liberalization took place and a number of measures were adopted to facilitate and encourage foreign investments in the economy.[21] As a result, FDI flows increased substantially[22] (Figure 14): in the past five years, for instance, inward FDI flows to China were more than five times what they were in 1990-1995, and, as stated before, in 2014 China was the biggest recipient of FDI inflows. China's inward FDI stock has been multiplied by fifteen over the past two decades; it is now the fourth largest in the world and by far the largest of the E20 emerging economies, having received between 1990 and 2015 about 30% of all FDI flows to the E20. In view of the magnitude of such investment and its impact on the Chinese economy,[23] an abundant literature on foreign direct investment in China has developed.

Figure 15a: China OFDI Stock 2004



Source: Based on data from UNCTAD FDI/TNC Database, Bilateral FDI Statistics.

Figure 15b: China OFDI stock 2014



Source: Authors' analysis based on data from Ministry of Commerce (MOFCOM), National Bureau of Statistics of the People's Republic of China, (2015), Statistical Bulletin of China's Outward Foreign Direct Investment 2014.

The Acceleration of Chinese Outward Investment

While the rise of China as a major foreign investor came long after its emergence as a major recipient of FDI, this does not make its extraordinary rise any less impressive. Its outward investment was virtually nil in the 1980s. It began in the late 1990s, consolidated in the early 2000s and surged in the past decade (Figure 14). The 2007-08 years were a tipping point in the fast internationalization of Chinese companies: China's outward FDI flows for instance more than doubled in
2008. OFDI flows, which reached an estimated 125 billion on average over 2014-2015 are ten times what they were in 2005. The year 2008 also marks the beginning of a significant expansion of Chinese investments in developed markets (see below).

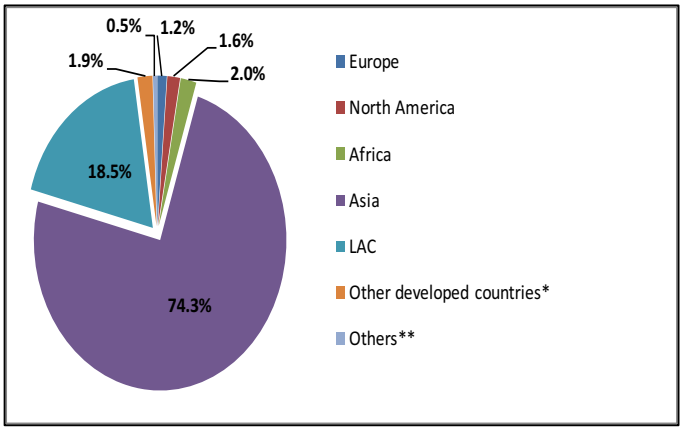
China today is the third largest investor in the world[24] (Figure 5) and by far the largest one among the E20 based on OFDI flows, while its stock of OFDI – at US$ 1 trillion in 2015, i.e. 10 times its pre-crisis level and more than 30 times larger than in 2000 – is one of the 10 largest in the world (Figure 9).

The fast expansion of Chinese OFDI led to a significant narrowing of the gap between its inward and outward FDI flows as illustrated in Figure 14. As mentioned above, some caution should be exercised in using inward and outward FDI data for China and in estimating precisely the size of this gap. It is hence difficult to conclude whether China is actually on the verge of becoming a net FDI exporter – or not. The fact remains that there has been a fast and significant expansion of Chinese outward FDI, a trend also illustrated by the remarkable emergence of Chinese multinational enterprises as shown in subsequent chapters in this report.

Chinese investment abroad has gone predominantly to developing countries. In recent years however, developed countries have also attracted an increasing share of Chinese OFDI (Figure 15a and b).

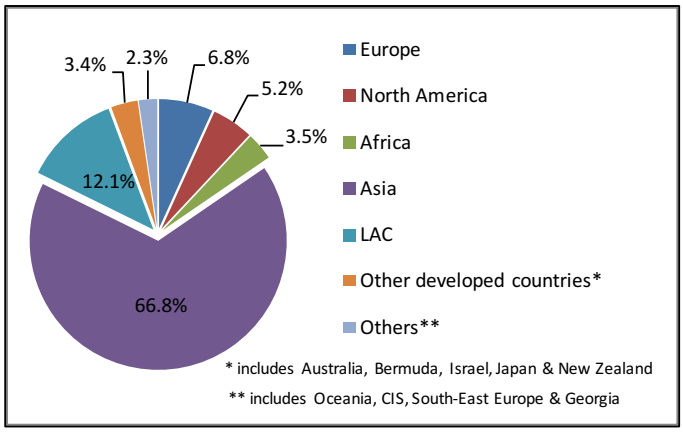
Asia, its natural market, has been the prime destination of Chinese OFDI. Its significance in China's FDI portfolio has declined over the past decade, but the region still accounted for about two thirds of Chinese OFDI stock in 2014 (Figure 16a and b). The prominent position of Hong Kong, however, is less pronounced today: for instance, while in 2004, Hong Kong accounted for about 68% of the stock of Chinese investment abroad, by 2014 this percentage had fallen to 58%.[25] In parallel, Chinese investment increased significantly in several countries in Asia, especially in the South East: in Cambodia, Laos, Myanmar,

Figure 16a: China OFDI Stock by region, 2004



Source: Based on data from UNCTAD FDI/TNC Database, Bilateral FDI Statistics.

Figure 16b: China OFDI Stock by region, 2014



Source: Based on data from Ministry of Commerce (MOFCOM), Statistical Bulletin of China's Outward Foreign Direct Investment 201, op. cit.

Mongolia, Vietnam, Indonesia and Singapore, for instance, the Chinese stock of FDI increased dramatically (from $701 million to $39.8 billion) over the 2004-2014 period[26].

One of the reasons for this increase is the search for cheaper labor by Chinese companies as part of the expansion of regional value chains.

Latin America and the Caribbean saw its share in China's OFDI stock decline over the past decade (Figure 16a and b), largely as a result of trends in the Caribbean financial centers. Indeed, while a significant part of its stock used to be invested in such centers,[27] the relative importance of those countries has declined, with their share in China's OFDI stock falling from 25%, its peak in 2006, to 11% today[28]. In parallel, China increased substantially its investment in countries such as Colombia, Ecuador, Brazil and Venezuela, multiplying its FDI stock by many folds over 2009-2014 in search for natural resources (Figure 17).

In Africa, Chinese investment has been largely directed to countries richly endowed with natural resources such as Algeria, Sudan, Congo Democratic Republic, Nigeria, Sudan, Zambia and Zimbabwe for instance which together have accounted for about 40% of Chinese investment flows in that region over the past decade. From a global perspective, Africa does not account for a large part of the total Chinese OFDI stock - about 3,5% in 2014 (Figure 16b).

The most recent wave of Chinese OFDI flows, following the latest financial crisis, has been significantly fed by investment in developed countries. Indeed, flows to developed countries have more than doubled over the past 5 years.

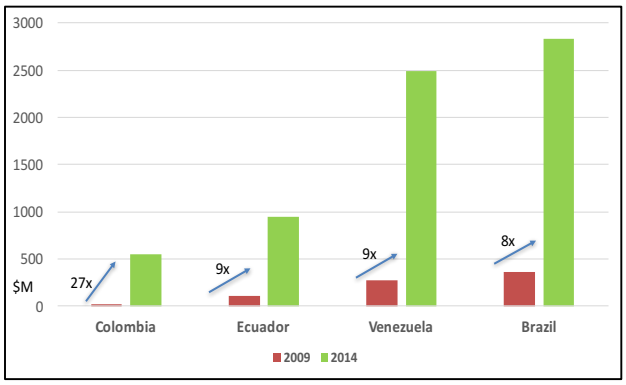
In 2010-2014, the share of developed countries in Chinese OFDI flows reached about 16%, with flows to Europe in particular increasing significantly after the Global Financial Crisis.[29] As a result, today, developed countries account for about 15% of Chinese OFDI stock against 5% ten years ago (Figures 15 a and 15b). As mentioned above, the financial crisis that affected developed economies as of 2007 provided investment opportunities that Chinese investors were in a position to take advantage of. The purchase of a number of European companies in recent years illustrates this development.

Impressive Outward FDI Trends Led by Government Policies

As in the case of inward FDI, the expansion of outward Chinese investment has been led by increasingly proactive government policies, as illustrated below:

- In 1979, the Chinese government stated that it would authorize investment abroad; however

Figure 17: Chinese OFDI Stock in Selected Latin American Countries 2009-14 (US $ millions)



Source: Authors' calculations based on data from UNCTAD, FDI/TNC Database, Bilateral FDI Statistics, and Ministry of Commerce (MOFCOM), Statistical Bulletin of China's Outward Foreign Direct Investment 2014, op. cit.

projects were approved on a case-by-case basis and the number of foreign investment projects—mostly by state owned enterprises—remained negligible until the mid-1980S. A number of specific measures and regulations were then adopted first to relax a number of controls and prohibitions and, in turn, to actively encourage and support Chinese firms investing overseas. During the mid-1980s, for instance, a series of regulations were introduced that established the principles and administrative process governing the examination and approval for overseas investment by Chinese enterprises. However, these policies were still subject to fluctuation during periods such as the Asian financial crisis and its aftermath.

- By the late 1990s, the direction of government policies further evolved towards a more determined and favorable approach to OFDI. For example, in line with government policy priorities, support was provided in the form of export tax rebates or financial assistance to targeted industries or large state owned enterprises (SOEs). SOEs have been at the forefront of Chinese outward investment expansion, although more recently, their role in Chinese OFDI has been diminishing, with their share in OFDI stock declining from 81% in 2006 to 54% in 2014.[30]

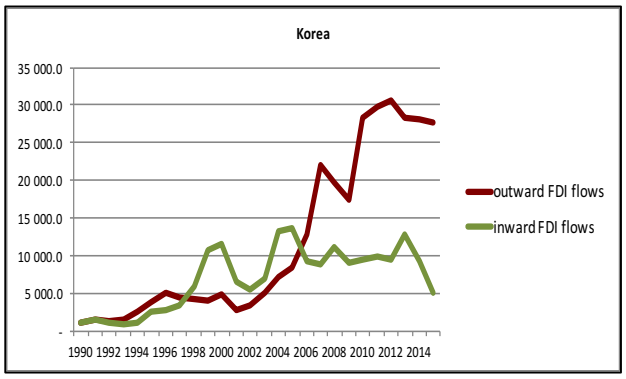
- A clear and definite signal in favor of OFDI emerged in 2000, with the launch of the "Go Global" strategy. A number of measures were adopted in the mid-2000s to implement it.[31] Since then, the "Go Global" policy has been strengthened and further elaborated. The Twelfth Five Year Plan (2011-2015), for instance, emphasized the acceleration of the Strategy. Over the years, measures were enacted to increasingly improve OFDI support policies, streamline approval procedures, simplify application requirements, relax restrictions on foreign exchange, and provide various types of assistance, for instance, in the collection of information by prospective Chinese outward investors. Financial support measures (e.g., easier access to finance and interest subsidized loans for investment in priority sectors or industries; subsidies in the context of aid programs; and tax incentives) were also put in place. A host of institutions,

  including among others MOFCOM, the National Development and Reform Commission, China Export and Import Bank, China Development Bank (CDB) and China Export & Credit Insurance Corporation, to name a few, are involved in providing this administrative, financial and commercial support.

In more recent years, China also engaged in active investment diplomacy to promote its "Go Global" strategy, as illustrated by the tours of the Chinese Premier in Latin America (two visits in the past two years) and in Africa (two visits in 2013 and 2014).

In addition, major initiatives, such as the One

Figure 18: Korea FDI flows, 1990-2015 (US $ millions)



Source: Based on data from UNCTAD, World Investment Report (WIR) 2016, Annex Table 1, op. cit.

Belt, One Road Initiative in which the Chinese government is playing a leading role, are also likely to support Chinese outward FDI expansion.

C) Republic of Korea

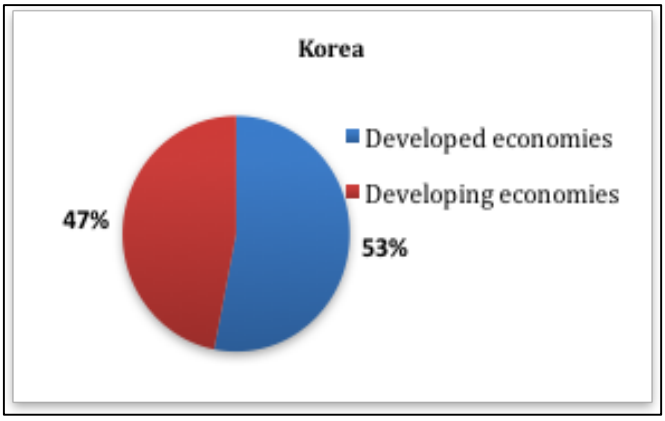
With about 5 US$ billions of inward FDI flows in 2015, Korea has been ranked 43th in the world as a FDI recipient, [32] and 17th among E20 emerging investors in the past twenty years and in particular, until the 1990s, the opening of the economy to foreign flows: they have increased fourfold since 1995 (Figure 18). While quite significant, however, such flows have been outpaced by those received by other countries, including a number of emerging economies, which explains Korea's relatively low ranking as a FDI recipient. Interestingly, Korea is now much more of an outward investor. It has clearly become a net investor: since 2006 its net investment position (FDI inflows minus outflows) has constantly been negative (Figure 18). In 2015 for instance its investment abroad exceed by more than 20 billion dollars its FDI inflows. This situation reflects the dramatic changes that have taken place in Korea's OFDI in the past decade, as illustrated below.

Characteristics of Korean OFDI

From the 1960s to the mid-1980s, Korean OFDI remained quite negligible. Outward investment was substantially constrained by a number of regulations and conditions (such as pre-approval) as well as strict foreign exchange controls.

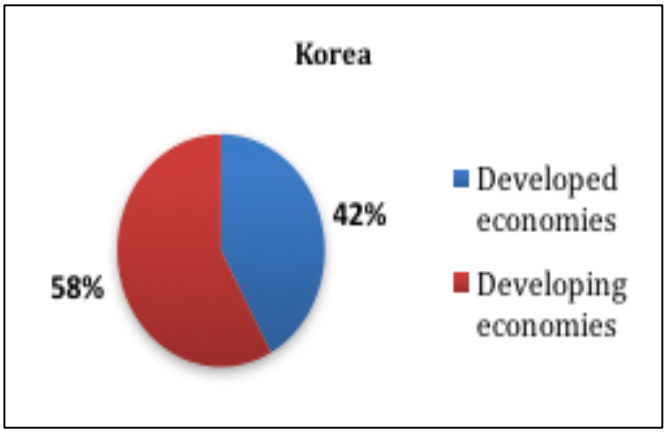
In subsequent years, the government began liberalizing outward investment. These reforms, combined with changes in the domestic environment (including increased production costs), a limited home market, and the need to secure access to natural resources and gain international competiveness led Korean firms to turn to overseas investment. In the

Figure 19a: Korea - OFDI Stock 2001



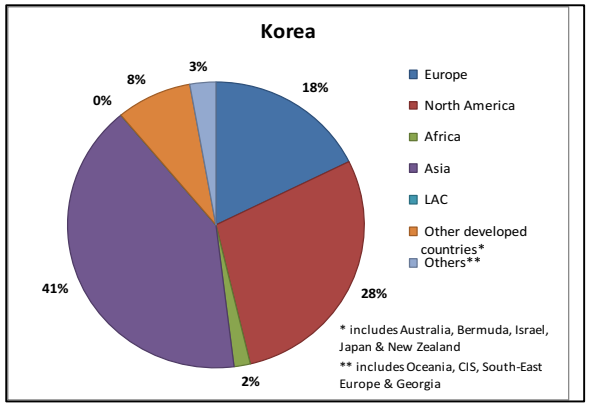
Source: Based on data from UNCTAD FDI/TNC Database, Bilateral FDI Statistics

Figure 19b: Korea - OFDI Stock 2012



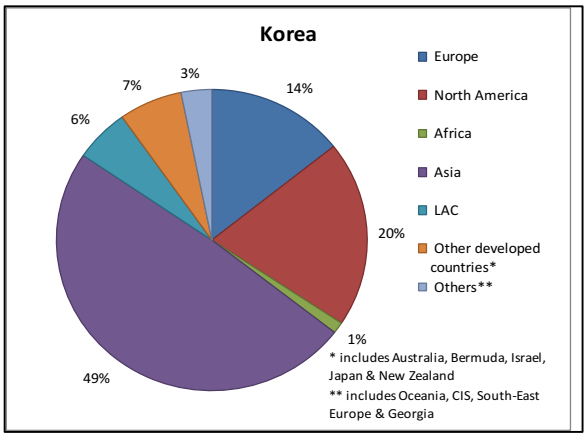
Source: Based on data from UNCTAD FDI/TNC Database, Bilateral FDI Statistics

Figure 20a: Korea OFDI Stock by region, 2001



Source: Based on data from UNCTAD FDI/TNC Database, Bilateral FDI Statistics

Figure 20b: Korea OFDI Stock by region, 2012



Source: Based on data from UNCTAD FDI/TNC Database, Bilateral FDI Statistics

late 1980s, OFDI flows began rising, which was followed by a second significant increase in the mid-1990s.

A new phase began at the turn of the century when OFDI flows from Korea clearly took off (figure18). Since then, the surge has remained virtually unabated (except at the time of the Asian financial crisis). Over 2000-2015, Korean FDI outflows increased more than sevenfold. Today, Korea figures among the top 15 international investors in the world (Figure 5); it is the second international investor among the E20 emerging economies.

During the 1980s, Korean firms invested mostly in their natural market, South East Asia, in search for lower productions cost (especially labor costs). During the second wave of the mid-1990s, while they continued to invest in Asia, they turned their attention to developed countries, in particular the United Sates – the preferred destination at the time – and the EU: altogether these two destinations represented about 46% of Korean OFDI flows during the 1990s[33]. By 2001, developed countries accounted for 53% of Korea's OFDI stock (Figures 19a). In the following period, the relative importance of developed countries in Korea's OFD portfolio declined. One of the reasons is that Korean firms have refocused their investment to Asia, primarily South East Asia and China.[34] By 2012, almost half of Korea's OFDI stock was invested in developing Asia (Figure 19b) compared to 40% in 2001.[35] Today, China is the largest recipient of Korean outward FDI, concentrating a quarter of its OFDI stock in 2014.[36] In addition, Korean firms also increased their FDI presence in Latin America and the Caribbean, which, while negligible in 2001 (Figure 20a), accounted for 6% of Korea's OFDI stock in 2012, with Brazil serving as the largest host in the region.[37]

The Key Role of Government Policies in Korea's OFDI Expansion

As in the case of China, government policies have played a key role in the internationalization of Korean enterprises. Korea has had a history of state-led development until the early 1980s when the need for reforms to ensure further rapid economic growth and development began to be felt; this led to a major pro-liberalization policy shift, and a wave of reforms in the economy. That shift was reflected in Korea's OFDI policy. Following a period until the late 1970s when controls and restrictions prevailed, the first phase of gradual liberalization with regards to outward investment by Korean firms began in the 1980s. For instance, a number of restrictions and controls (including specific requirements on investors' business experiences and host country conditions) were relaxed

and the requirement for pre-approval of outward investment by the Bank of Koreawas removed and replaced by a more flexible system, including a notification system for investment in non-restricted areas. This latter system was gradually simplified.[38]

During the second phase, beginning in the late 1990s, an active OFDI promotion policy was put in place, as part of the broader industrial policy of the country to increase firm competitiveness. Measures were introduced especially regarding finance and support services. For example, measures were taken to expand financial support to Korean firms investing abroad, to facilitate foreign Exchange transactions (by simplifying procedures and relaxing a number of conditions), to enhance overseas investment insurance as well as to export credit insurance. The notification system was adopted for virtually all industries, and a number of services were set up to facilitate collection of information for potential outward investors and to encourage cooperation abroad between Korean firms[39].

Since the mid-2000s, this active promotion policy has been reinforced. The strong support to outward investment was clearly reaffirmed with the adoption in 2007 of the Policy for Supporting Korean Firms to Invest Abroad and the creation of the Committee for Global Business Operation chaired by the Prime Minister. Today a significant network of agencies provides strong institutional support to Korean outward investors, including in particular KOTRA (the Korea Trade and Investment Agency), the Korea Export Import Bank and a number of government related organizations[40].

Conclusion

The FDI landscape has faced profound changes in the past two decades with the consolidation of emerging economies as key players both as recipients and sources of FDI. Particularly impressive in this respect has been the part played by the E20 in OFDI since the early 2000s, especially in the aftermath of the Global Financial Crisis. This trend was clearly led by Asia; in the process Latin America, which used to be the leader in OFDI from emerging economies, was outpaced. The financial crisis was a turning point in that respect. OFDI from China, for instance, experienced a remarkable surge. On the other hand, Brazil - which had been the major investor among the E20 - saw its OFDI lose momentum. Differences between OFDI support policies partly explain this situation: for instance, in China and Korea—the two largest investors of the E20 in 2015—the internationalization of enterprises has become a strategic issue and OFDI support policies have been instrumental to achieve it. This has not been the case in Latin America where pro-active OFDI support policies have been very limited or non-existent. Even in Brazil, long unique in the region in this respect– support for OFDI, however limited, appears to have lost traction in recent years.

The geographical distribution of OFDI from emerging economies has also evolved, even if such FDI still remains largely South-South. While investors from emerging economies used to invest primarily in other emerging and developing economies, usually in their neighboring region, a number of multinationals from emerging economies have ventured forcefully into more distant destinations in the past decade Indeed, the evolution of the OFDI stock of two major economies in the E20, Brazil and China, has increasingly shifted towards developed countries. There is also a notably growing presence of Asian investors in Latin America and Africa, even though the reverse is not true. Brazil, for instance, that is still the largest investor from Latin America, has hardly any investment in Asia.

The emerging market multinationals that are behind the radical change in the FDI landscape are examined in more details in the following chapters.

Notes

[1] FDI *flows* record the value of cross-border *transactions* related to direct investment during a given period of time, usually a quarter or a year. Such flows consist of equity transactions, reinvestment of earnings, and intercompany loans. FDI *stocks* measure the *total level* of direct investment (or investment position) reached at a given point in time, usually the end of a quarter or of a year.

[2] Based on data from *United Nations Conference on Trade and Development, UNCTADstats,* Available at: http://unctadstat.unctad.org (accessed August 2016) and "Annex Table 1." UNCTAD, World Investment Report (WIR) 2016. Available at: http://unctad.org/en/pages/DIAE/World%20Inves tment%20Report/WIR-Series.aspx (accessed August 2016).

[3] The E20 group includes: Argentina, Brazil, Chile, China, Colombia, Egypt, India, Indonesia, Iran, Malaysia, Mexico, Nigeria, Philippines, Poland, Russia, Saudi Arabia, South Africa, Korea, Thailand and Turkey (see Chap. 1)

[4] "Annex Table 1." UNCTAD, World Investment Report (WIR). Available at: http://unctad.org/en/Pages/DIAE/World%20Investment%20Report/Annex-Tables.aspx (accessed August 2016)

[5] See for instance Lecraw (1977), Wells (1983), Lall (1983), Dunning (2005), and UNCTAD (2006).

[6] A literature on Emerging Market Multinationals has developed over the past decade; see for instance Cuervo-Cazurra (2012), Cuervo-Cazurra and Ramamurti (2014); Casanova (2009); Dunning, Kim and Park (2008); Goldstein (2007); Matthews (2006); Narula (2012), Narula and Dunning (2010); Ramamurti (2012); Ramamurti and Singh (2009); Rugman(2009); Sauvant (2008 and 2010); Williamson, Ramamurty and Fleury (2013) among others.

[7] In the past three years OFDI flows from the E20 accounted on average for21% of global OFDI flows (UNCTAD 2016).

[8] Brazil reported negative FDI outflows according to the methodology of the fifth edition of the IMF *Balance of Payments Manual.* This reflects, inter alia, the way intercompany loans (that are one of the components of FDI – see note 1 above) are accounted for under that methodology. Indeed, during the period, firms in Brazil received large amounts of loans from their overseas subsidiaries. Brazilian firms continued to undertake equity investment abroad, but less than the loans they received from their subsidiaries, resulting in negative OFDI flows. (ECLAC, FDI in Latin America, 2015).

[9] In general, South-South investment refers to the investment among developing countries

[10] De La Cruz J. and al. (2012). "Brazil's Surging Foreign Investment: A Blessing or a Curse?" *USITC Executive Briefings on Trade* (October 2012).

[11] The OFDI stock of Brazil in 1980 was estimated at about US$ 38 billion, in current prices. Source: *UNCTADStat*, Available at: http://unctadstat.unctad.org/EN/Index.html (accessed May 2016).

[12] Based on data from UNCTAD, UNCTAD, World Investment Report (WIR) 2016, Annex table 1.

[13] Intracompany loans constitute one of the components of FDI. See notes 1 and 8 above. Petrobras divestments following the fall in oil price and the corruption scandals also contributed to the negative outflows.

[14] Ranked by nominal GDP (see Figures 1 and 5 in Chapter 1).

[15] On the concept of natural markets in MNCs, see Casanova, Lourdes (2004) and Ranjan, Subramania and Aldemir Drummond (2004)

[16] Data for 2014 from Banco do Brasil , Brazilian Capital Abroad (CBE) Survey - Base year 2014

[17] As stated by the Trade and Industry Development Minister, Luiz Fernando Furlan, at a lecture at Fundação Dom Cabral, 22 March 2003 : "The Brazilian Government expects the country to have 10 really transnational companies by the end of President Lula's term of office" (Source: UNCTAD, Occasional note, UNCTAD/WEB/ITE/IIA/2004/16 7 December 2004) .

[18] UNCTAD (2007)

[19] Carlos Zalaf Caseiro, Luiz and Gilmar Masiero. (2014). "OFDI promotion policies in emerging economies: the Brazilian and Chinese strategies," *Critical Perspectives on International Business*. 10(4): 237-255..

[20] In 1978, China reformed its economy by adopting outward an oriented development strategy, market liberalization measures, and introduced its "open door" policy.

[21] For more information, see e.g., OECD (2008), *OECD Investment Policy Reviews - China*, and Davies, Ken. (2013). "Chinese Investment Policy: An Update." *OECD Working Papers on International Investment*.

[22] Statistical data on FDI in and out of China should be interpreted with some caution. One of the main reasons is "round tripping," whereby OFDI from a country comes back to be reinvested into that country, often to take advantage of fiscal incentives granted to attract inward FDI in the economy. On the one hand, round tripping—especially through Hong Kong—may lead to an overestimation of flows in and out of China and, given the importance of Hong Kong in China inward and outward FDI, this must be kept in mind. On the other hand, a number of multinational enterprises route their FDI to China through Hong Kong. In this latter case, inflows to China from Hong Kong correspond to "true" FDI. In addition, with the abolition of fiscal incentives on inward investment in China in 2008, round tripping should be diminishing.

[23] The FDI/GDP ratio of China is close to 2,5%, which is not so low if one takes into account the size of its economy, the second largest in the world (in nominal GDP).

[24] The role of Hong Kong as a major destination of Chinese OFDI, and its potential impact on OFDI estimates due to round-tripping and offshoring (see note 22), should be noted. That being said, estimates of the 2013 Chinese OFDI flows adjusted for such an impact amounted to almost 82 US$ billion, versus 108 US$ billion without adjustment, still leaving China in a top position among investors (5th world rank in 2013). (Based on estimates by Garcia-Herrero, Alicia, Le Xia and Carlos Casanova (2015). "Chinese Outbound Foreign Direct investment: How Much Goes Where After Round-Tripping and Offshoring?, BBVA Working paper No15/17..

[25] Based on data from Ministry of Commerce (MOFCOM), National Bureau of Statistics, of the People's Republic of China, (2015), *Statistical Bulletin of China's Outward Foreign Direct Investment 2014.*

[26] Based on data from UNCTAD, *bilateral FDI statistics), and* Ministry of Commerce (MOFCOM), *Statistical Bulletin of China's Outward Foreign Direct Investment 2014*, op. cit.

[27] Particularly the British Virgin Islands and the Cayman Islands.

[28] Based on data from UNCTAD, *bilateral FDI statistics) and* Ministry of Commerce (MOFCOM), *Statistical Bulletin of China's Outward Foreign Direct Investment 2014,* op. cit.

[29] The surge began after 2008, with Chinese FDI flows to Europe increasing six-fold in 2009. By 2014, such flows were three times their 2009 level.

[30] Source: *MOFCOM, Ministry of Commerce, Statistical Bulletin of China's Outward Foreign Direct Investment 2014*, op. cit.

[31] For more details see OECD (2008) *OECD Investment Policy Reviews, China, Paris: Organisation for Economic Co-operation and Development* and Davies, Ken. (2013). "Chinese Investment Policy: An Update." *OECD Working Papers on International Investment*.

[32] Due to a decline in its inward FDI flows in 2015, Korea's position in inward FDI ranking fell from 29th to 43rd in 2015. This is a bit exceptional, as Korean Inward FDI flows fluctuated between US$ 10 and 12 billion between 2010 and 2014.

[33] Frédérique Sawchwald (2001). *Going Multinational – The Korean Experience of Direct Investment*. New York: Routledge.

[34] China accounted for about 20% of Korean OFDI flows between 2001 and 2012 for instance

[35] In South-East Asia, a large part of Korean investment has been in manufacturing (see for instance Soo Kee Tan (2013) , South Korea's Outward foreign Direct Investments in Southeast Asia : Trends ; motivation and case studies*, International Journal of East Asian Studies Vol. 2, No. 1, 2012/2013, pp. 111-128)*).,

[36] Central Bank of Korea, Economic Statistics Department (2016). *International Investment Position by Region and Currency at End of 2015* (preliminary).

[37] Brazil alone accounted for a third of Korea's OFDI stock in Latin America and the Caribean ; together with Mexico, Panama and Peru, these four countries concentrated 70% of this stock. (Source: UNCTAD, *FDI/TNC database, Bilateral FDI statistics*)

[38] UNCTAD (2007). "Global Players from Emerging Markets: Strengthening Enterprise Competitiveness through Outward Investment, United Nations, Geneva. Available at: www.unctad.org/en/Docs/iteteb20069_en.pdf and Jung, Min Kim and Dong Kee Rhe (2009). "Trends and Determinants of South Korean Outward Foreign Direct Investment." *The Copenhagen Journal of Asian Studies* 27(1): 126-154..

[39] Nicolas, Françoise; Stephen Thomsen & Mi-Hyun Bang (2013). "Lessons from Investment Policy Reform in Korea." *OECD Working Papers on International Investment*.

[40] Ibid.

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Chapter 3

Emerging Market Multinationals, Disrupting the Competitive Landscape

Emerging market multinationals (eMNCs[1]) are defined in this report as multinationals headquartered in an emerging market.[2] These companies are key players in their home countries and have recently become major players in the developed world and in other emerging markets. The rise of eMNCs is testimony to the increasing role played by these countries in the global economy. Not only are Emerging Markets the destination and origin of major investment flows, but their firms are also now amongst the world's largest corporations with extensive international presence.

In this chapter we evaluate historical data of the Fortune Global 500,[3] which has been published in its current form since 1990 and has expanded in 1995 to include financial institutions. Studying the evolution of the Fortune Global 500 shows how eMNCs have become more prominent. While in 2001 almost all companies were from the United States, the numbers declined to 128 in 2015 while the number of eMNCs has grown. In 2015, a total of thirty-six countries in the world had corporations in this ranking, fourteen of which were from the E20. With about 30% of entries in the list (146), E20 based companies are a distinctive feature of the global economy today. The growth and expansion of multinationals from E20 economies were behind the radical change in the Outward Foreign Direct investment landscape discussed in Chapter 2.

In the next chapters, we examine in detail the rise of the E20 (as defined in Chapter 1) eMNCs. In this current chapter we look at their growth to better understand these new actors and challenge widely held beliefs associated with them.

3.1 Emerging Market Multinationals

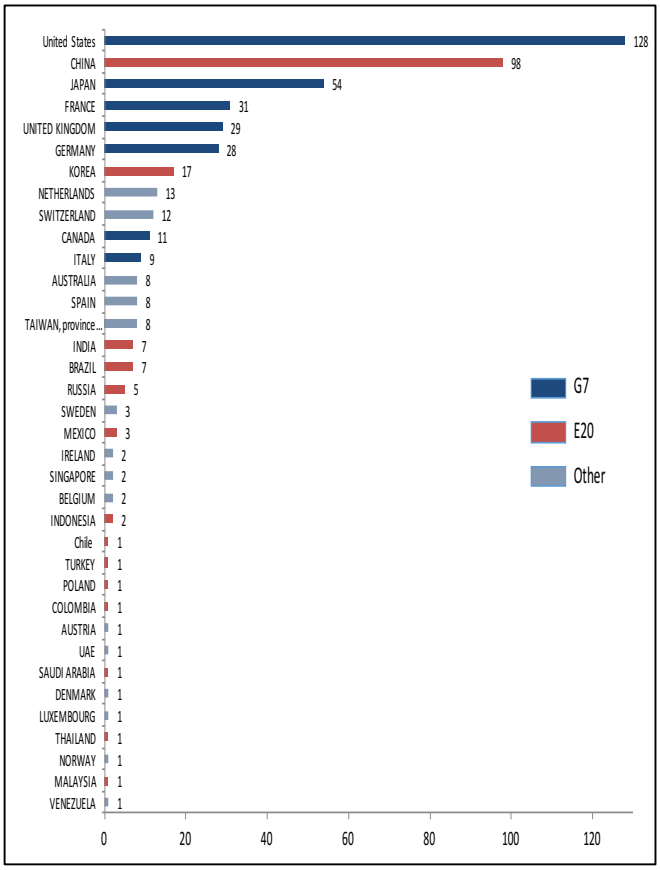
Until recently, companies from the so-called triad (United States, Europe and Japan) dominated the universe of the largest MNCs in the world as evidenced in their presence in the list of Fortune 500 companies. However, now companies such as the Korean Samsung, the Chinese State Grid, the Industrial and Commercial Bank of China, the Russian Gazprom and the Mexican Cemex are present everywhere and are emblematic of the emergence of these new multinationals. These companies are leaders in their own industries and they are starting to set new standards for competition and compete with lower prices than their peers in United States and Europe. Following an examination of this phenomenon, we consider the industry distribution and the industry leaders of eMMNCs.

In the Fortune Global 500, 94% of all companies (i.e. 473) listed are concentrated in seventeen countries, of which five are emerging economies (China, Korea, Brazil, India and Russia). These five account for about 90% of all 146 companies from E20 countries in the Global 500. The increase in eMNCs in the Fortune Global 500 began in 2004 and accelerated after the Global Financial Crisis of 2008 (see Figure 2). All five countries in Figure 2 have more companies today than in 2004. China has multiplied by five (16 in 2004 and 98 in 2015), Brazil has doubled (from 3 to 7), Korea increased by 50% (from 11 to 17) India from 5 to 7 and Mexico from two to three. As in the case of FDI flows discussed in Chapter 2, Asia (China, Korea, India and Indonesia) dominates the picture with some presence from Latin America (Brazil and Mexico). It is worth noting that Africa does not have any firm listed in the Global Fortune 500 (Figure 1 lists all countries from the highest to the lowest number of companies in the ranking).

The world leader of the ranking continues to be the United States with 128 companies; China is ranked number two with 98 companies and Japan is third with 54. In terms of regions, the European Union as a whole leads with 130 companies. The triad represents the majority of the ranking with more than 60% of the Global 500. Yet, as we shall see, the rapid rise of the E20 multinationals has been dramatic: today there are seven E20 countries with two or more companies in the Global Fortune 500 (China (98), Korea (17), India (7), Brazil (7), Russia (5), Mexico (3) and Indonesia (2), as well as seven others with only one company in the list.

In Figure 3 we have correlated the size of the economy as measured by nominal Gross Domestic

Figure 1: Ranking of Countries Listed in the 2015 Fortune Global 500



Source: Author's and EMI analysis based on data from Fortune (n.d.), Fortune 500 Directory, http://fortune.com/global500/ (accessed May 2016).

Product (GDP) and the number of companies in the Fortune Global 500. In the six biggest countries the GDP and the number of companies move in parallel.

Among the E20, China and Korea are in a similar situation. On the other hand, most E20 countries including Brazil, India, Russia, Mexico, Indonesia, Turkey and Saudi Arabia have far less companies in the Fortune Global 500 list than could be expected.

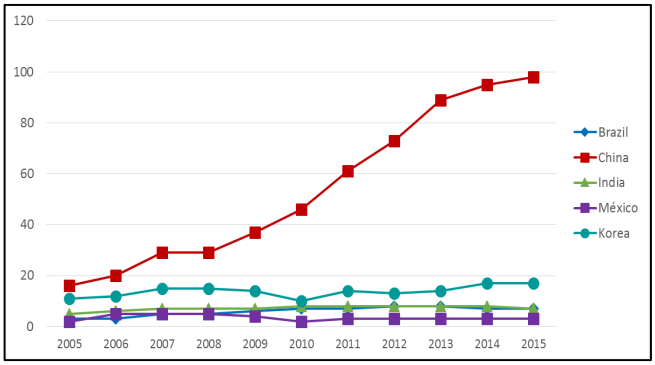
A) The Chinese Lead the Trend

China[4] has clearly been commanding the rising number of emerging market multinationals with ninety-eight companies in the Fortune 500 Global, far ahead of any other emerging country. Korea, next after China and the only other E20 economy in the top 10 biggest countries by number of companies in the Fortune Global 500 (see Figure 1) has seventeen firms, followed by India (7), Brazil (7), Russia (5), Mexico (3) and Indonesia (2). In these countries, the number of big companies has risen much less dramatically (see Figure 2).

Since 2004, the number of Chinese companies classified as emerging multinationals has increased more than five times. At this current growth rate (from less than 20 in 2005 to almost 100 in 2015), it would not take China much time to surpass the United States as the country with the greatest number of companies by revenue. In addition, if we consider the ten largest companies, China leads with three firms (the oil corporations Sinopec and China National Petroleum, and the electrical State Grid), followed by the United States (2) with the retail behemoth Wal-Mart and the oil giant Exxon Mobil), in addition to one each for Netherlands/United Kingdom (Royal Dutch Shell)), United Kingdom (British Petroleum, BP), Germany (Volkswagen), Japan (Toyota) and Switzerland (Glencore), (see Table 1). The US companies dominate not only by numbers but by revenues. However, the average revenue is much closes and the average revenues of the 10 biggest is almost the same.

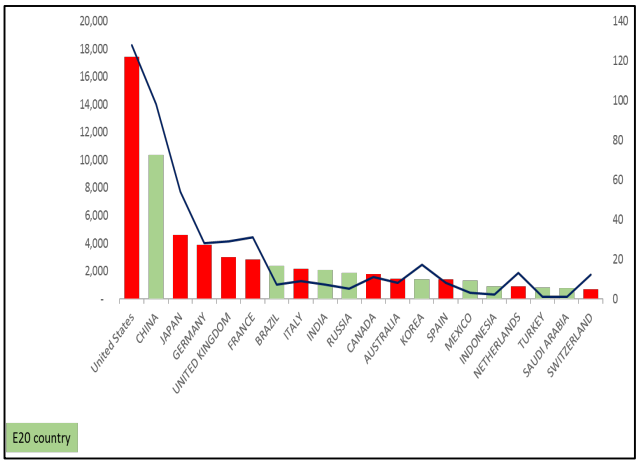
Emerging economies have made significant inroads not only in the top 10 companies in the world but also in the top 100: indeed, among the latter, twenty-seven are from E20 countries, with seventeen from China, three from Korea and Russia and one from Brazil, Venezuela, Mexico and Malaysia. The dominance of Chinese and Asian companies within the E20 is clearly shown in Figure 4 with more than three quarters of all big companies from that continent. As discussed in the previous chapter, the government policies in that region have delivered as shown in the striking expansion of Chinese firms in recent years and their significant role in international Mergers and Acquisitions (M&A's), a phenomenon examined in more detail in Chapter 5.

Figure 2: Growth in Number of Companies from selected Emerging Markets in the Fortune Global 500



Source: Author's and EMI analysis based on data from Fortune (n.d.), Fortune 500 Directory, http://fortune.com/global500/ (accessed May

Figure 3: Correlation between Nominal GDP (USD billion) and the Number of Companies in the Fortune Global 500



Source: Author's and EMI analysis based on data from Fortune (n.d.), Fortune 500 Directory, http://fortune.com/global500/ (accessed May 2016).
Note: The bars indicate nominal gross domestic product (GDP) in USD billion (left-hand axis) and the line indicates the number of companies from the respective country included in the Fortune 500 list (right-hand axis).

B) Top 20 eMNCs

Given the increasing importance of E20 countries covered in the two previous chapters, we turn to what we call the Top 20 E20 companies (Top 20 eMNCs), of which twelve are based in China, three in Russia, two in South Korea and one each in Brazil, Mexico and Malaysia (see Table 2).

The list is led by companies in the petroleum refining industry with as many as seven companies in this sector. This is followed by four banks, two in Mining, Crude Oil production and Engineering, Construction and one each in Utilities, Electronics, Electrical Equip, Energy, Telecommunications and Motor Vehicles and Parts.

Twelve out of the top twenty eMNCs are Chinese companies. They are either public or state-owned enterprises (SOEs). The latter make up about 35% of the top twenty eMNCs. Most of these organizations were founded between 1950s and 1990s (average year of foundation is 1970).

We can see four waves of foundation:

1) Three before 1940: Bank of China (1912), Samsung and Pemex (1938).
2) Six in 1950's: China Railway (1950), Agricultural Bank of China (1951), Petrobras (1953), China Construction Bank (1954), China National Petroleum and China State Construction Bank (1955)
3) Four in 1980's: China State Construction Bank and China Offshore Oil (1982), Petronas (1983) and Industrial and Commercial Bank of China (1984).
4) Seven between 1991-2002: SK Holdings 1991), Gazprom and Lukoil (1993), China Mobile (1997), Sinopec (2000) and State Grid (2002)

Table 1: Ten Largest Companies on Fortune Global 500 Ranked by Revenue in 2015

Rank 2015	Rank 2014	Company	Industry	Country	Revenue $ billions	Profit $billions	Profit Margin
1	1	WAL-MART STORES	General Merchandisers	United States	$485.65	$16.36	3%
2	3	SINOPEC GROUP	Petroleum Refining	CHINA	$446.81	$5.18	1%
3	2	ROYAL DUTCH SHELL	Petroleum Refining	NETHERLANDS	$431.34	$14.87	3%
4	4	CHINA NATIONAL PETROLEUM	Petroleum Refining	CHINA	$428.62	$16.36	4%
5	5	EXXON MOBIL	Petroleum Refining	United States	$382.60	$32.52	8%
6	6	BP	Petroleum Refining	UNITED KINGDOM	$358.68	$3.78	1%
7	7	STATE GRID	Utilities	CHINA	$339.43	$9.80	3%
8	8	VOLKSWAGEN	Motor Vehicles and Parts	GERMANY	$268.57	$14.57	5%
9	9	TOYOTA MOTOR	Motor Vehicles and Parts	JAPAN	$247.70	$19.77	8%
10	10	GLENCORE	Mining, Crude-Oil Production	SWITZERLAND	$221.07	$2.31	1%

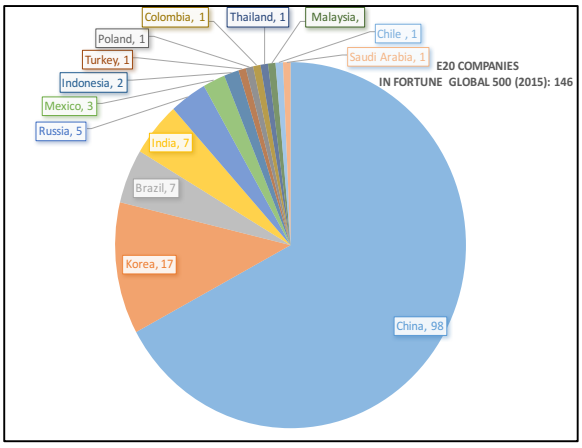
Emerging Multinational

Rev. Sum US (all=128 companies): US$ 8,69 trillions
Rev. Average (linear): US$ 67,9 billions
Rev 10 biggest US: US$ 2,22 trillions

Rev. Sum CHINA (all= 97 companies): US$ 6,07 trillions
Rev. Average (linear): US$ 62,6 billions
Rev 10 biggest CHINA: US$ 2,11 trillions

Source: Authors analysis based on data from Fortune (n.d.), Fortune 500 Directory, http://fortune.com/global500/ (accessed May 2016).

Figure 4: Number of Fortune 500 Companies by Emerging Market Country



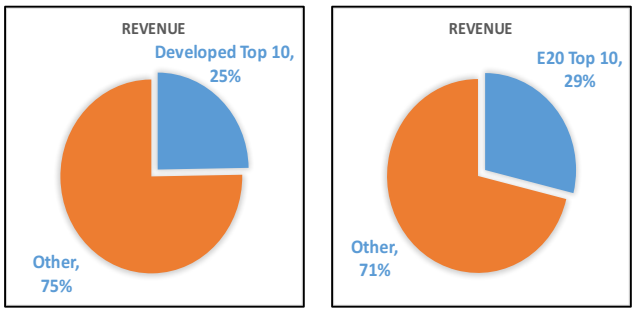
Source: Author's and EMI analysis based on data from Fortune (n.d.), Fortune 500 Directory, http://fortune.com/global500/ (accessed May 2016)

Table 2: Top 20 eMNCs in Fortune Global 500 in 2015, Ranked by Revenue

Rank 2015	Company	Industry	Country	Revenue $ millions	Profit $ million	Profit Margin	Year of Foundation	Ownership	Activities	International Presence
2	SINOPEC GROUP	Petroleum Refining	CHINA	446,811	5,177	1%	2000	State-owned	Sinopec explores and develops oil fields, and produces and sells crude oil and natural gas; processes and purifies crude oil into refined petroleum products; and manufactures and sells petroleum products. It manufactures and sells petrochemical products and also engages in the import and export of petroleum, natural gas, petroleum products, petrochemical and chemical products. With the tremendous scope of businesses, Sinopec was dubbed one of the largest producer and supplier of refined oil products in China.	34
4	CHINA NATIONAL PETROLEUM	Petroleum Refining	CHINA	428,620	16,359	4%	1955	State-owned	China National Petroleum Corporation (CNPC) is an integrated international energy company that engages in hydrocarbon exploration and production operations. It also manufactures and supplies chemical products and equipment for oilfield services and offshore engineering. CNPC is believed to be China's largest oil and gas producer and supplier.	29
7	STATE GRID	Utilities	CHINA	339,427	9,796	3%	2002	State-owned	State Grid Corporation of China constructs and runs power grids. It provides power supply for societal developments across China and operates assets in overseas markets. State Grid service area covers about 88% of China's territory.	13
13	SAMSUNG ELECTRONICS	Electronics, Electrical Equip.	SOUTH KOREA	195,845	21,922	11%	1938	Public	Samsung Electronics Co. Ltd engages in consumer electronics, home appliances, and mobile communications businesses. Its core businesses are semiconductors and electronic products and it has enjoyed tremendous success in its smartphone business, which has improved the Samsung brand power in international markets.	57
18	INDUSTRIAL & COMMERCIAL BANK OF CHINA	Banks: Commercial and Savings	CHINA	163,175	44,763	27%	1984	Public	Industrial and Commercial Bank of China Limited offers Corporate Banking, Personal Banking, and Treasury Operations services. It also provides e-banking, fund, insurance, and leasing services.	34
26	GAZPROM	Energy	RUSSIA	144,409	4,124	3%	1993	Public	Gazprom engages in the production, transportation, distribution, storage of gas, crude oil, and gas condensate. Gazprom owns its supply and distribution activities, a vertically integrated company. It holds the world's largest natural gas reserves and ranks number one in the world in terms of thermal energy generation. As a result of this strategic position, Gazprom is expected to promote Russia's national interest as it pursues profit.	34
28	PETROBRAS	Petroleum Refining	BRAZIL	143,657	(7,367)	-5%	1953	Public	Petrobras engages in exploration, development, transportation, and marketing of crude oil, natural gas liquids, and natural gas. It also engages in trade of electricity and production of biodiesel.	24
29	CHINA CONSTRUCTION BANK	Banks: Commercial and Savings	CHINA	139,933	36,976	26%	1954	Public	China Construction Bank Corporation offers personal, corporate, and institutional banking products and services. It mainly operates as a commercial bank with network of about 15,000 branches and sub-branches and an extensive customer base in Mainland China. The bank has banking relationships with many of the largest firms in industries that are strategically important to China's economy. Aside from commercial banking, it has also created subsidiaries in non-banking business areas, such as investment banking, insurance, mutual funds, leasing, and trust.	22
36	AGRICULTURAL BANK OF CHINA	Banks: Commercial and Savings	CHINA	130,048	29,126	22%	1951	Public	Agricultural Bank of China Limited provides corporate banking, personal banking, treasury operations, investment banking, and wealth management services. It also provides agro-related banking and accident insurance products.	11
37	CHINA STATE CONSTRUCTION ENGINEERING	Engineering, Construction	CHINA	129,887	2,079	2%	1982	Public	China State Construction Engineering Corporation Limited performs real estate, infrastructure development works.	12
43	LUKOIL	Petroleum Refining	RUSSIA	122,803	4,746	4%	1993	Public	Lukoil explores, develops, produces, refines, and distributes crude oil. It also produces steam and electricity.	41
45	BANK OF CHINA	Banks: Commercial and Savings	CHINA	120,946	27,525	23%	1912	Public	Bank of China Limited provides corporate banking, personal banking, treasury operations, investment banking, and insurance services. It is also involved in aircraft leasing business.	29
47	PEMEX	Mining, Crude-Oil Production	MEXICO	119,239	(19,929)	-17%	1938	State-owned	Petromex is involved in exploration, refining, and sale of crude oil, natural gas, and petroleum and natural gas derivatives. It also produces, delivers, and trades thermal and electric energy.	8
51	ROSNEFT OIL	Petroleum Refining	RUSSIA	113,663	9,026	8%	1993	Public	Rosneft engages in the exploration, development, production, and sale of crude oil and gas. It also processes crude oil and other hydrocarbons into petroleum products and provides aircraft refueling services and survey and drilling services	46
55	CHINA MOBILE COMMUNICATIONS	Telecommunications	CHINA	107,529	10,451	10%	1997	State-owned	China Mobile Communications Corporation provide mobile voice communications services. As a state-owned enterprise, it experiences frequent government involvement in its business activities. Nevertheless, it benefits from significant protectionist advantages from the China's government. It is important to note that CMCC operates primarily through its publicly-listed operating subsidiary China Mobile Limited.	4
57	SK HOLDINGS	Petroleum Refining	SOUTH KOREA	106,248	(506)	0%	1991	Public	SK Holdings engages in information and communication technology convergence services. It also manufactures semiconductor materials and modules.	10
60	SAIC MOTOR	Motor Vehicles and Parts	CHINA	102,249	4,540	4%	1955	Public	SAIC Motor, a product of numerous mergers and corporate re-structurings, manufactures and sells passenger vehicles and commercial vans under a variety of brands. It also develops car components.	8
68	PETRONAS	Petroleum Refining	MALAYSIA	100,619	11,322	11%	1983	Public	Petronas stores, transports, distributes, and sells natural gas components. Its business operations can be categorized into gas processing, gas transportation, utilities, and regasification. These categories essentially involves the processing of natural gas from gas fields, managing gas transmission pipelines, marketing industrial utilities, and maintaining offshore liquefied natural gas regasification terminal.	2
71	CHINA RAILWAY ENGINEERING	Engineering, Construction	CHINA	99,538	959	1%	1950	State-owned	China Railway Engineering engages in engineering, construction,design, surveying, manufacturing, and technical consulting services. It is also involved in property development and mining.	6
72	CHINA NATIONAL OFFSHORE OIL	Mining, Crude-Oil Production	CHINA	99,262	8,592	9%	1982	State-owned	China National Offshore Oil Corporation is involved in the exploration of oil and gas, in the sale of petrochemical products, and in the liquefaction of and power generation through natural gas. Moreover, it offers finance leasing and investment services.	26

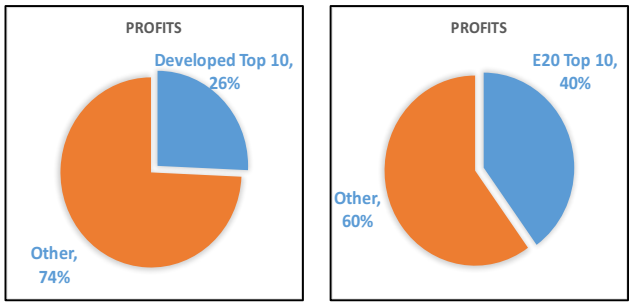
Source: Authors and EMI analysis based on data from Fortune (n.d.), Fortune 500 Directory, http://fortune.com/global500/ (accessed May 2016)

Figure 5: Concentration of Revenues in Top 10 companies versus rest of Top 100 from developed and E20 countries in the Fortune Global 500, 2015



Source: Author's and EMI analysis based on data from Fortune (n.d.), Fortune 500 Directory, http://fortune.com/global500/ (accessed May 2016).

Figure 5a: Concentration of Profits in Top 10 companies versus the Rest of Top 100 in the Fortune Global 500, 2015



Source: Author's and EMI analysis based on data from Fortune (n.d.), Fortune 500 Directory, http://fortune.com/global500/ (accessed May 2016).

These companies operate beyond their national borders, with Samsung having the most international presence (in 57 countries) and the Malaysian Petronas having the least (in only two). The average international presence for the top twenty eMNCs is about twenty-three countries.

Regarding profits, seven of them have average profits between 1 and 5 percent, five between 5 and 10 percent, the Chinese banks are the most profitable ones and the two oil companies from Latin America, Pemex and Petrobras have losses.

3.2 The Winner Takes All

In terms of revenues, the Top 10 eMNCs are even more dominant than their counterparts in the Global Fortune 500. For instance, while the Top 10 developed countries companies contribute to about 25% of total revenue of the top 100 companies from developed countries, in the case of eMNCs, the share is 29% (Figure 5).

The difference is even greater in terms of profitability, with Top 10 developed countries companies contributing to 26% of profits of the Top 100 companies from developed countries whereas the Top 10 eMNCs contribute as much as 40% of the profit of top 100 companies in the E20 (figure 5a). It should be noted that three Chinese banks, which are very profitable, are among the ten largest eMNCs.

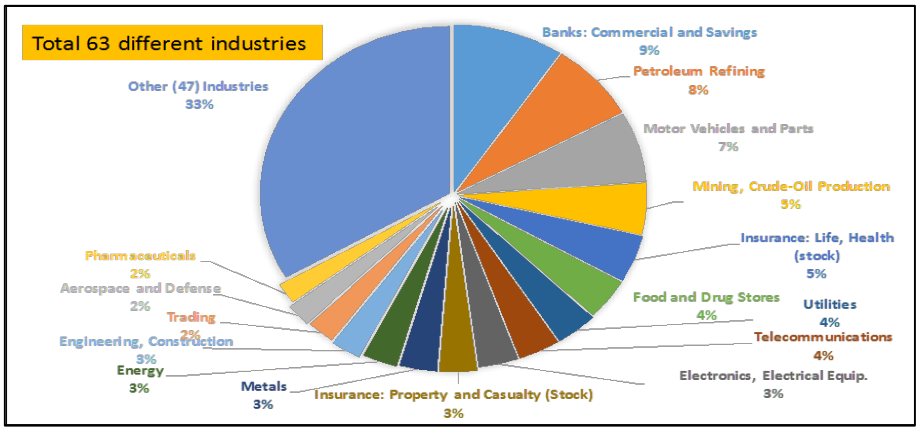
This suggests that there is a definite advantage in terms of share of revenues and profits in being a leader in an emerging country.

3.3 Industry Concentration

The Global Fortune 500 includes a diverse group of companies which belong to sixty-three different industries (Figure 6[5]). The E20 companies in the list, however, are more concentrated and belong to only half (i.e., 32) of these industries (Figure 7). These eMNCs are particularly concentrated in seven industries as shown in Figure 7: Petroleum refining (13%), Mining, Crude, Oil Product (12%), Commercial and Savings Banks (11%), Metals (7%), Motor Vehicles and Parts (6%), Energy (6%) and Engineering, Construction (6%) accounting for 61% of all Emerging Multinationals. There are a number of interesting findings in this figure.

1) There are three industries (Petroleum Refining, Mining, Crude Oil and Production and Banking) that stand out with a total of

Figure 6: Industry Distribution of Fortune Global 500 Companies in 2015



Source: Author's and EMI analysis based on data from Fortune (n.d.), Fortune 500 Directory, http://fortune.com/global500/ (accessed May 2016).

36% of all the companies and each one represents more than ten percent.

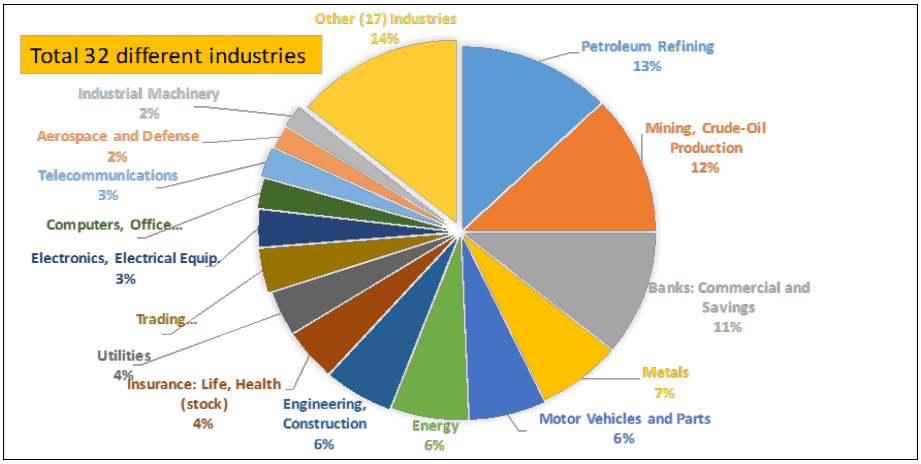
2) The financial sector from China mainly and also Brazil are significantly represented, which speaks to the power of financial centers beyond the traditional ones in New York, London, Frankfurt, Paris and Tokyo. This is an interesting trend worth following as China's renminbi is challenging the might of the traditional reserve currencies (see Chapter 1).
3) Although 25% of all companies are natural resource-based industries, Petroleum refining (13%) requires technology and large financial investments. Indeed, by number of barrels per day, the biggest oil refining companies are from India, Venezuela and Korea.

There are six industries each with twenty or more companies in the Global Fortune 500: [6] Banks (9%), Petroleum Refining (8%), Motor Vehicles and Parts (7%), Life, Health Insurance (5%), Mining and Crude Oil Production (5%) and Food and Drug Stores (4%). These six industries account for 87 (about 38%) of the Fortune Global 500. Emerging multinationals are significantly represented in these industries.

- In Banking[7] one third of the largest banks in the world by revenues are from E20 countries (figure 8), which is quite remarkable if one takes into account the history of major financial crises in Emerging Markets, which often have bankrupted the local banks: 1980's debt crisis in Latin America, 1994 Mexico, 1997 South Asian, 1998 Russia, 1999 Brazil, 2001 Argentina and so forth. China is the leader, with one fifth of the total number of Fortune 500 banks followed, among the E20, by Brazil (5%), Russia (4%) and India (2%).

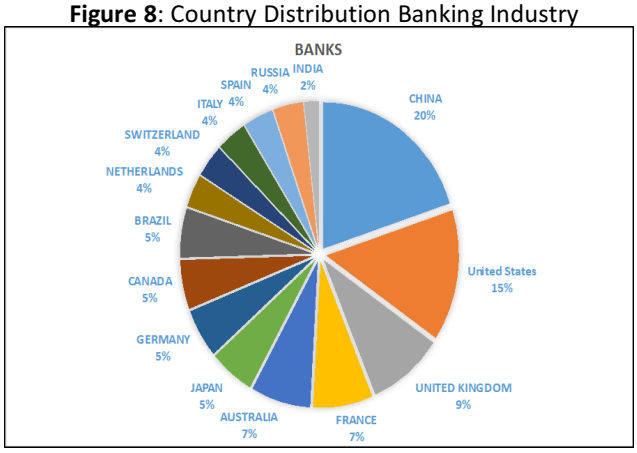
- While in the *petroleum refining* industry, United States and Japan have the largest number of Top 500 companies (figure 9). India, Korea, China and Russia have almost 30% of all *petroleum refining* companies in the Global Fortune 500 with India leading

Figure 7: Industry Distribution of the 146 eMMNCs in the Fortune Global 500 in 2015



Source: Author's and EMI analysis based on data from Fortune (n.d.), Fortune 500 Directory, http://fortune.com/global500/ (accessed May 2016).

Figure 8: Country Distribution Banking Industry

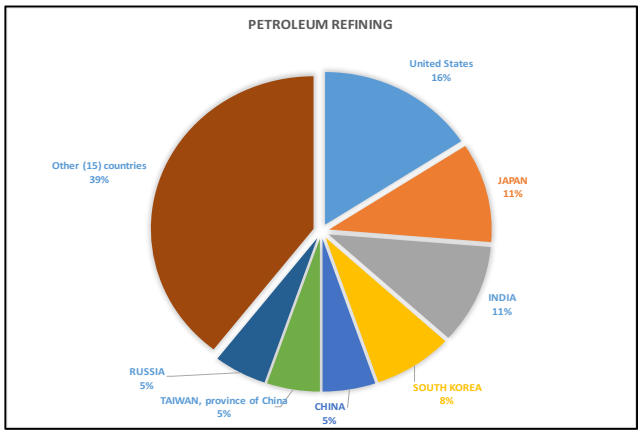


Source: Author's and EMI analysis based on data from Fortune (n.d.), Fortune 500 Directory, http://fortune.com/global500/ (accessed May

the way among the E20 with 11% of the companies, Korea next with 8%, and China and Russia with 5% each. While other E20 countries are leaders by number of companies, China has fewer companies in this industry but they are bigger than its E20 counterparts. As mentioned before, oil refining requires large capital investment, technology and know-how; the increasing presence of E20 firms in this industry demonstrates the improved capabilities of E20 companies to move up the value chain.

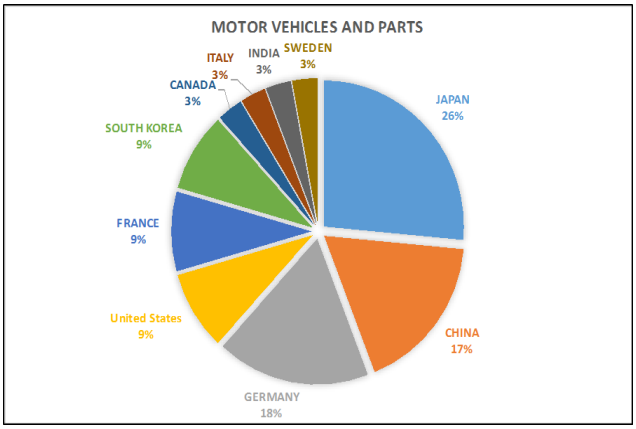
- Although the top spots in the *Automobile industry* are taken by Japan and Europe,

Figure 9: Country Distribution Petroleum Refining Industry in Fortune Global 500 (2015)



Source: Author's and EMI analysis based on data from Fortune (n.d.), Fortune 500 Directory, http://fortune.com/global500/ (accessed May 2016).

Figure 10: Country Distribution Motor Vehicles and Parts Industry in the Fortune Global 500 (2015)



Source: Author's and EMI analysis based on data from Fortune (n.d.), Fortune 500 Directory, http://fortune.com/global500/ (accessed May 2016).

Chinese companies are a strong force with which to be reckoned, with 17% of Global Fortune 500 companies in the motor vehicles and parts industry (Figure 10). The Chinese automotive industry has been the largest in the world measured by automobile unit production since 2008, and since then, its annual production exceeds that of the European Union or that of the United States and Japan combined. Korea and India are other countries with notable presence of 9% and 3% of companies in Global 500 as shown in Figure 10.

Figure 11: Country Distribution Mining and Crude-Oil Production Industry in the Fortune Global 500 (2015)

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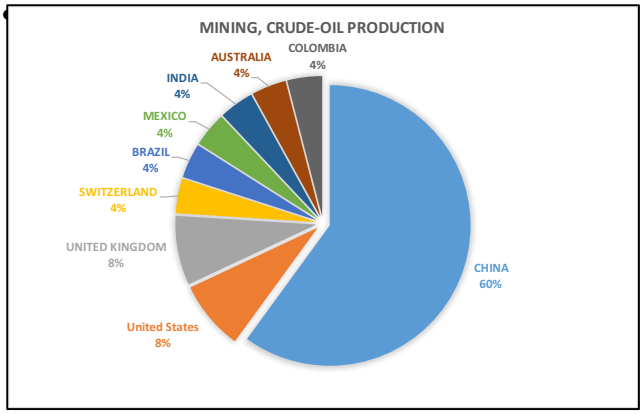
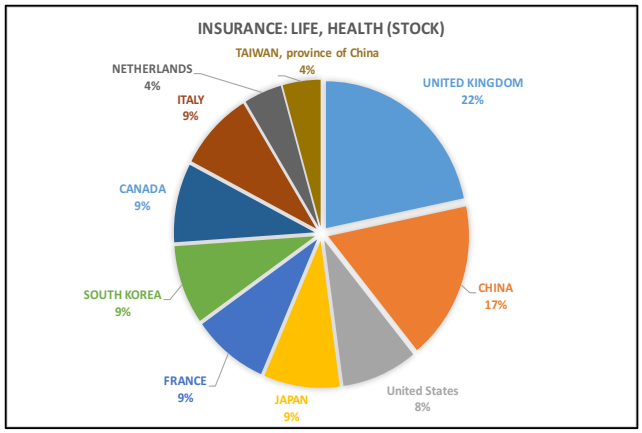


Source: Author's and EMI analysis based on data from Fortune (n.d.), Fortune 500 Directory, http://fortune.com/global500/ (accessed May 2016).

Figure 12: Country Distribution Life, Health Insurance Industry in the Fortune Global 500 (2015)



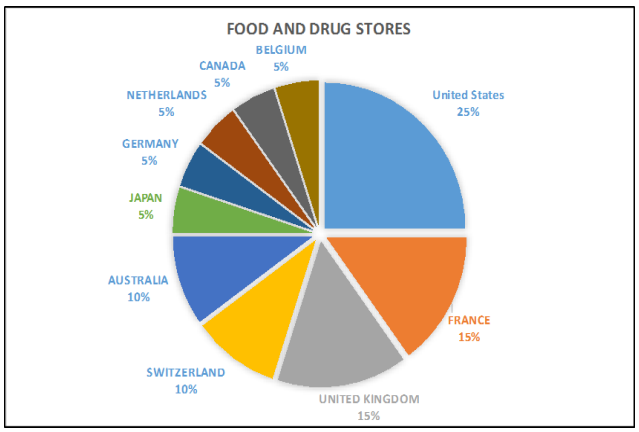
Source: Author's and EMI analysis based on data from Fortune (n.d.), Fortune 500 Directory, http://fortune.com/global500/ (accessed May 2016).

- The industry dominated by E20 companies in general and by China in particular is the *Mining and Crude Oil Production*. China has an overwhelming presence with 60% of all the Global Fortune 500 companies in this industry and with Brazil, Mexico, India and Colombia each having 4%. Together, more than two-thirds (76%) of companies in this industry are based in E20 countries (see Figure 11). Brazil, Mexico, India and China are countries rich in natural resources and it is only logical that their companies are among the biggest, often state-owned. China wants to ensure the supply of natural resources required for its growth and development.

- The life and health insurance industry is primarily dominated by developed countries. China and Korea are two E20 countries with significant presence with 17% and 9% of Global Fortune 500 companies (Figure 12). This may change in the near future: according to data from Bloomberg published in China Daily (http://bit.ly/2cqsqyX), Chinese firms have announced acquisitions abroad in this domain of more than USD$ 9 billion, ten times more than the value in 2012.

- If there is one industry that has remained largely unaffected by the growth of E20 countries, it has been the *Food and Drug industry* where there is no presence of E20 firms in the Global 500 (figure 13). This industry is quite local and dominated by very well established global brands. It will take time to displace these giants. This may change, though in view of the recently announced M&A by Chinese forms grow and increase its global presence in this industry.

Figure 13: Country Distribution Food and Drug Stores Industry in the Fortune Global 500

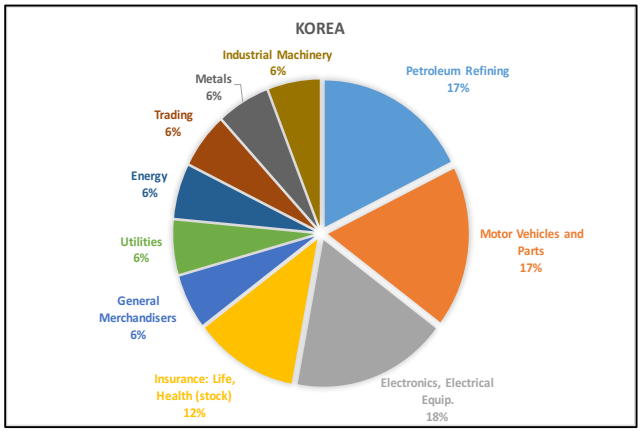


Source: Author's and EMI analysis based on data from Fortune (n.d.), Fortune 500 Directory, http://fortune.com/global500/ (accessed May 2016).

It is interesting to note that while there are many similarities between E20 countries, there are some differences as well, as illustrated by the industry composition of China and Korea, the two most powerful countries in terms of companies in the Global 500:

- Global Korean firms are concentrated in three industries: petroleum refining (17%), motor vehicles and parts (17%) and Electronics, Electrical Equip (18%) that together account for more than half of the Korean firms in the Global 500 (Figure 14).
- Industry distribution is less concentrated in China: four industries (Mining, Crude Oil Production, Banking, Metals, Engineering and

Figure 14: Industry Distribution for Korean Companies in the Fortune Global 500 (2015)



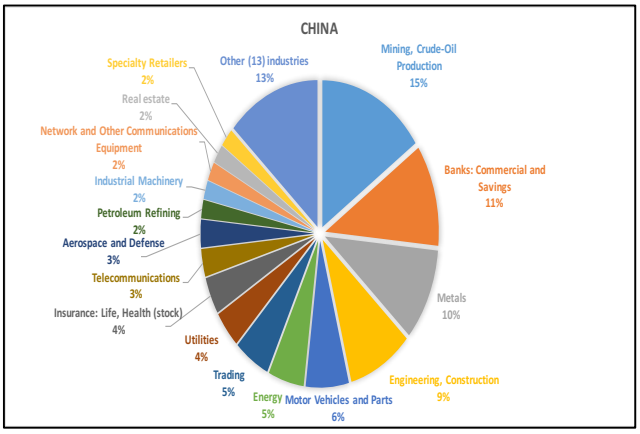
Source: Author's and EMI analysis based on data from Fortune (n.d.), Fortune 500 Directory, http://fortune.com/global500/ (accessed May 2016)

Construction, and Motor Vehicles and Parts) dominate the landscape (see Figure 15), accounting for about 45% of all Chinese companies in the Global 500, while a total of 29 industries are represented among the Chinese Global Fortune 500.

3.4. Change of Guard: Industry Leadership Moving to the South

As shown in previous sections, emerging multinationals have not only significantly increased their presence among the largest corporations in the world, they have also become world leaders in a number of industries.

Figure 15: Industry Distribution for Chinese Companies in the Fortune Global 500 (2015)



Source: Author's and EMI analysis based on data from Fortune (n.d.), Fortune 500 Directory, http://fortune.com/global500/ (accessed May 2016)

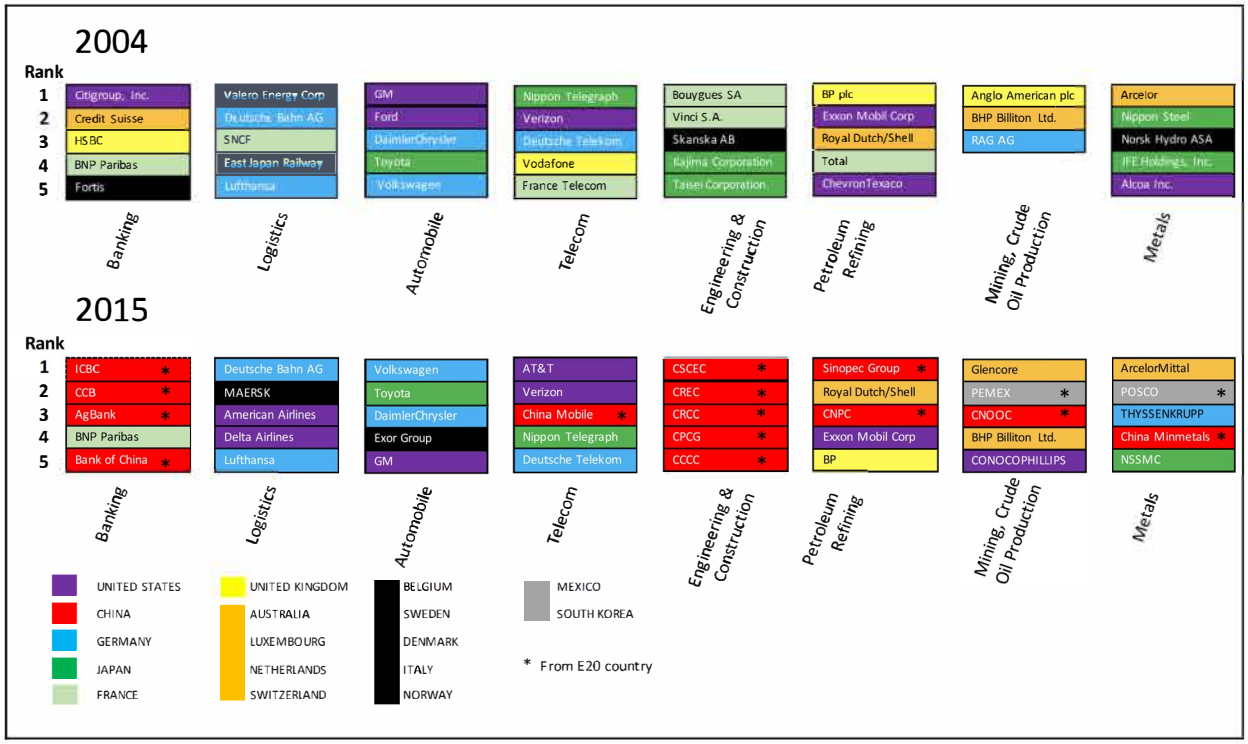
A comparison of the top five companies in eight major industries (Banking, Logistics , Automobile, Telecom, Engineering & Construction, Petroleum Refining, Mining, Crude Oil Production and Metals) between 2004 (the beginning of the rise of eMNCs) and 2015 demonstrates this evolution (Figure 16).

Twelve years ago no eMNC from E20 was an industry leader while in 2015, 40% (16 out of 40 companies) came from E20 countries (largely dominated by China). It is also interesting to note that Brazil, Russia and India do not have any company in the top five of any of the industries.

Regarding the leadership in the different industries it is important to note the following:

1) There has been a major shift in the banking industry where in 2004 United States and Europe dominated the top five ranks. In 2015, all of the top five banks but one are Chinese Banks (ICBC, CCB, Agricultural Bank of China,Bank of China); the non- Chinese firm is based in France (BNP Paribas).
2) The shift in leadership is even more startling in the engineering and construction industry, where in 2004, Europe and Japan dominated the Top 5 list while a decade later all of the Top 5 ranks are held by Chinese companies (CSGEC, CREC, CRCC, CPCG, CCCC).
3) The E20 countries have also made progress in the Mining, Crude Oil Production and Metals industry where in 2004, Japan and Europe held leadership positions. Right now Mexico (Pemex) and China (CNOOC) are represented.

Figure 16: Top Five Companies and Country of Origin across Different Industries In the Fortune Global 500 in 2004 and in 2015



Source: Author's and EMI analysis based on data from Fortune (n.d.), Fortune 500 Directory, http://fortune.com/global500/ (accessed May 2016).

4) In two industries—logistics and automobiles—the list of the very top continues to be dominated by western companies from the United States, Japan and Europe.

Emerging Multinationals Have Made It to the Top

In this chapter we have analyzed historical data of the Fortune Global 500, one of the oldest rankings by revenues of global companies and a key indicator that emerging multinationals are making global inroads in the business world.

- Although China dominates, we find representatives from a wide array of countries even with only one entry in the list of Fortune Global 500. Regarding size and by decreasing order of importance, the new players are coming mostly from China, Korea, India, Brazil, Russia, Mexico and Indonesia.

- The number of EMCs has increased rapidly since 2004 and, in the case of the Chinese companies, after the financial crisis. This growth has resulted in a number of industries eMNCs becoming industry leaders on a global basis. If we consider the five top leaders of eight industries, these new players were nowhere to be seen in 2004 while 40% (16 out of 40 companies) emerged from E20 countries (largely dominated by China) last year.

- The trend of "winner taking all" is more pronounced in emerging markets. This gap signals the need to grow the pipeline of mid-size companies and reduce the gap with the big companies.

eMNCs have indeed made remarkable inroads in terms of numbers and leadership, but they still have some way to go as will be seen in the next chapter where we explore, eMNCs' profits, market capitalization and internationalization.

Notes

[1] We use the terms Emerging Market Multinationals and Emerging Multinationals to refer to those companies based in an Emerging Market and for the sake of simplicity we use the acronym eMNCs.

[2] Samsung, for instance, is considered an emerging market multinational because its headquartered in Korea, which is defined for the purposes of this report as an emerging economy and is one of the E20. EMI adopts the United Nationals Conference on Trade and Development (UNCTAD) definition of a Multinational (or Transnational, the term used by UNCTAD), which states that 'a transnational corporation is an enterprise that controls assets of other entities in countries other than its home country, usually by owing a certain equity capital stake (usually 10% or more). As we will discuss in Chapter 4 most of the Fortune Global 500 companies studied in this Chapter are Multinationals according to the above definition. http://unctad.org/en/PublicationChapters/wir2014chMethodNote_en.pdf. Accessed July, 2016.

[3] The *Fortune Global 500* is published annually by the American magazine Fortune and ranks the largest *500* corporations worldwide as measured by total revenues. Market capitalization, an alternative methodology for measuring the size of a company is discussed in chapter 4.

[4] The Fortune Global 500 includes five companies from Hong Kong as Chinese, which are: Aia group, China Resources National, Hutchinson Wampoa, Jardine Matheson, Lenovo Group and Noble Group. FDI statistics on inward and outward FDI flows and stocks, as well as GDP and other economic indicators treat Hong Kong and China separately. Hence, in Chapters 1 and 2, Hong Kong and China are treated separately.

[5] The figure uses the industry names categorized in the Global Fortune 500

[6] The percentages in brackets in this section refer to the number of companies in Fortune Global 500.

[7] To get an aggregate picture of the banking industry, we have combined banks categorized as "*Banks: Commercial and Savings*" and "*Commercial Banks*" in the Global Fortune 500.

Chapter 4

Emerging Multinationals, Still Some Way to Go

In the previous chapter we discussed how multinationals from E20 countries are coming of age on the global stage. And yet, despite their remarkable rise, they still have a long way to go in order to catch up with their developed counterparts. In this chapter, we consider this room for growth as measured by eMNCs' profitability, market capitalization and internationalization.

4.1 Emerging Multinationals Profitability

In terms of profits, the United States, with five companies, dominates the ranking of ten biggest companies, followed by the four Chinese banks and the Korean Samsung (Table 1). As shown in Table 1 the Chinese state-owned Industrial and Commercial Bank of China (ICBC) leads the pack in overall profits with US$ 44.76 billion, nearly twice those of the biggest US bank, Wells Fargo, and ahead of Apple, in second place with US$ 39.51 billion. Six of the top ten most profitable companies in the Fortune Global 500 are banks, including four Chinese (ICBC, China Construction Bank, Agricultural Bank of China and Bank of China) and two US financial institutions (Wells Fargo and JP Morgan Chase). The other four are technology firms (Apple and Microsoft in the United States and Samsung in Korea) and the US oil giant Exxon Mobil (Fortune, n.d., accessed May 2016). However, most emerging multinationals face in their domestic markets

Table 1: Top 10 companies on Fortune Global 500 ranked by profit in 2015

Rank 2015	Company	Industry	Country	Revenue $ millions	Profit $millions	Profit Margin
1	INDUSTRIAL & COMMERCIAL BANK OF CHINA	Banks: Commercial and Savings	CHINA	163,175	44,763	27%
2	APPLE	Computers, Office Equipment	United States	182,795	39,510	22%
3	CHINA CONSTRUCTION BANK	Banks: Commercial and Savings	CHINA	139,933	36,976	26%
4	EXXON MOBIL	Petroleum Refining	United States	382,597	32,520	8%
5	AGRICULTURAL BANK OF CHINA	Banks: Commercial and Savings	CHINA	130,048	29,126	22%
6	BANK OF CHINA	Banks: Commercial and Savings	CHINA	120,946	27,525	23%
7	WELLS FARGO	Commercial Banks	United States	88,372	23,057	26%
8	MICROSOFT	Computer Software	United States	86,833	22,074	25%
9	SAMSUNG ELECTRONICS	Electronics, Electrical Equip.	SOUTH KOREA	195,845	21,922	11%
10	J.P. MORGAN CHASE & CO.	Commercial Banks	United States	102,102	21,762	21%

E20	G7	Other

Source: Data from Fortune (n.d.), Fortune 500 Directory, http://fortune.com/global500/ (accessed May 2016).

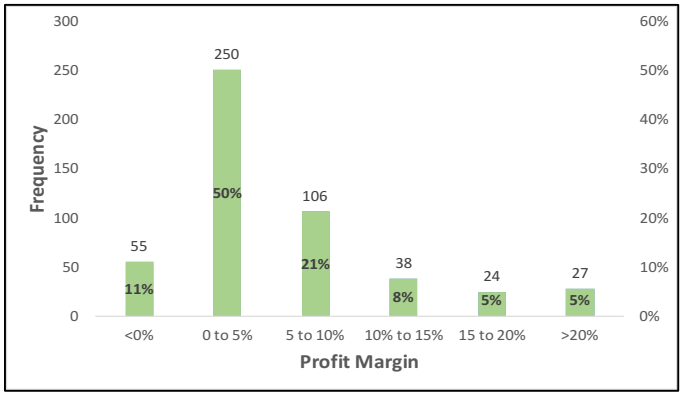
challenging environments such as an inadequate business environment, political instability, currency volatility and sudden economic crisis. In general, most of these factors pull down the profitability of multinationals based in emerging markets, though in some situations (for instance in some particular industries in China) government support may boost profits.

In order to compare the profitability between emerging multinationals and their developed country peers, we compared the profit margins[1] of the companies in the Fortune Global 500. Figure 1 shows the frequency distribution by profits of all Fortune Global 500 companies.

We observe here that 11% of the companies have negative profit margins (losses) and another 50% of companies have profit margins between 0 to 5%. In comparison, as many as 17% of companies have negative profit margins (losses) and the number of companies with margins between 0 to 5% increases to 56%. Thus only 27% of eMNCs manage healthy profit margins over 5%, this group increases to 39% when we consider all Fortune Global 500 companies. The frequency distribution of profit margins for Emerging multinationals is shown in Figure 2.

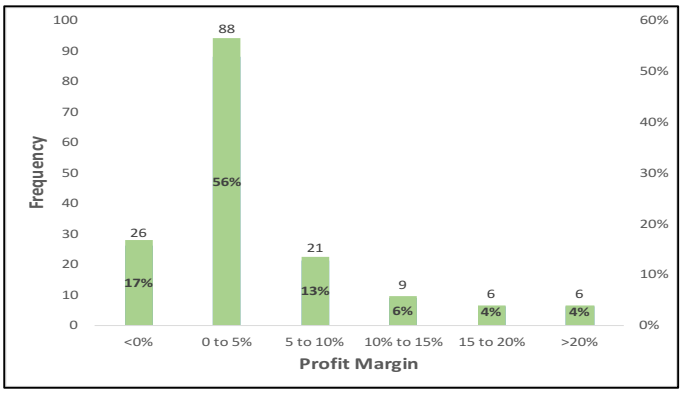
To date, it appears that eMNCs are more focused on revenues growth than margins. As we shall see, with the exception of the Chinese firms in Banking and Korean companies in Automobile, emerging multinationals in other industries lag in profitability as their profit margins are lower compared to developed country companies.

Figure 1: Frequency Distribution by Profits of Fortune Global 500 Firms (2015)



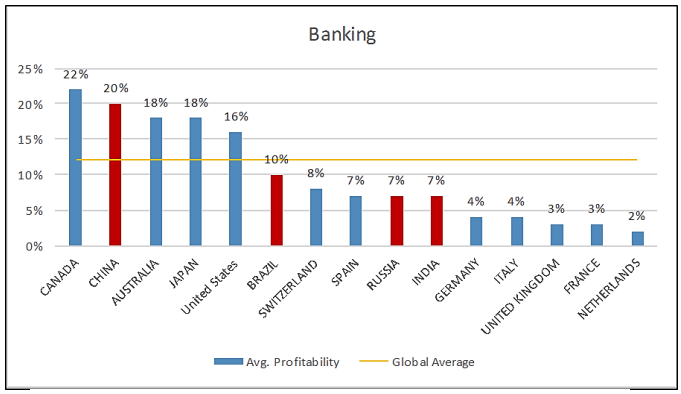
Source: Authors and EMI analysis based on data from Fortune (n.d.), Fortune 500 Directory, http://fortune.com/global500/ (accessed May 2016)

Figure 2: Frequency Distribution by Profit of Emerging Multinationals in Fortune Global



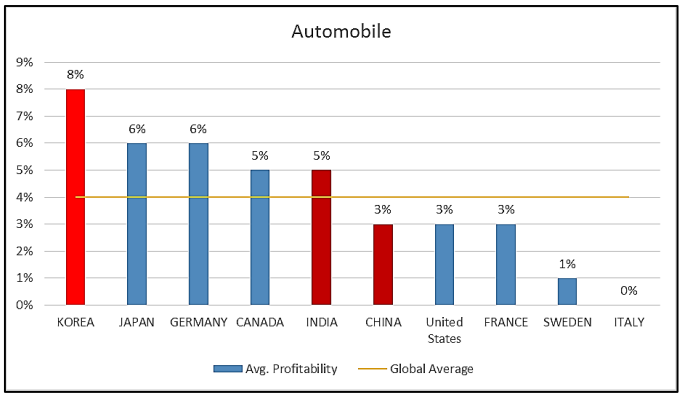
Source: Authors and EMI analysis based on data from Fortune (n.d.), Fortune 500 Directory, http://fortune.com/global500/ (accessed May 2016)

Figure 3: Average Profit Margin by Country of Origin for Companies from the Banking Industry in the Fortune Global 500 in 2015



Source: Authors and EMI analysis based on data from Fortune (n.d.), Fortune 500 Directory, http://fortune.com/global500/ (accessed May 2016).

Figure 4: Average Profit Margin by Country of Origin for Companies from the Automobile Industry in the Fortune Global 500 in 2015



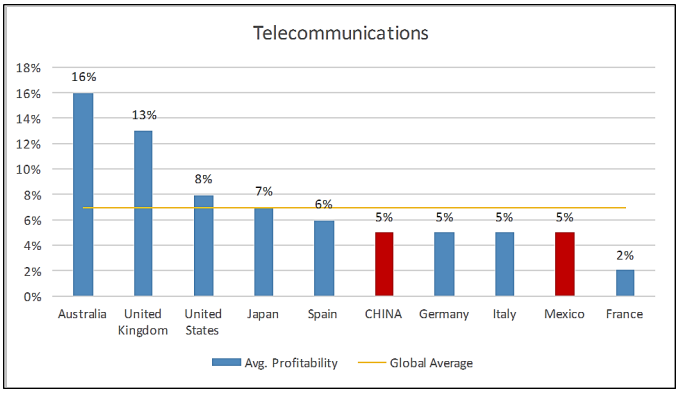
Source: Authors and EMI analysis based on data from Fortune (n.d.), Fortune 500 Directory, http://fortune.com/global500/ (accessed May 2016).

In what follows, we further unpack the profitability tendencies in major industries such as Banking, Automobile[2], Telecommunications, Logistics[3], Engineering & Construction, Mining, Crude Oil production, Metals and Petroleum Refining.[4]

It is interesting to note that in a few industries, like banking, eMNCs show better profit margins than multinationals from developed countries. Although this needs further research, some factors might explain this trend, such as ownership by the government and a more favorable regulatory environment or even some form of government support through favorable interest rate policies for instance. We start by considering the *banking industry* (see Figure 3).

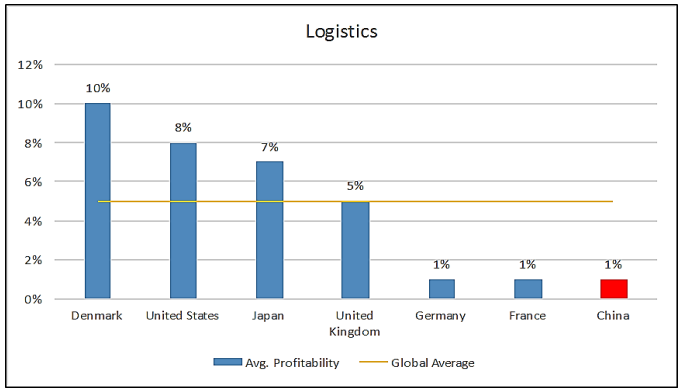
- In the *Banking industry* (Figure 3), Chinese banks have the second highest profit margins in the world and do better than banks from most developed and emerging countries with an average profit margin of 20%, significantly higher than the 12% average for all the banks in Fortune Global 500 and just a shade below that of Canada (22%). However, the profit margins of banks from other E20 countries such as Brazil (10%), Russia and India (both 7%) are lower than the global average. There are in total eleven banks in the Fortune Global 500 and of these the top four—i.e. Industrial and Commercial Bank of China, China Construction Bank, Agricultural Bank of China and Bank of China—are all state owned. Moreover, the average profit margin for these four banks is 25%, higher than the Chinese average of 20%. This tends to suggest that state ownership could be one of the factors ensuring the higher than average profitability of these banks. The Chinese banks profits can be partly explained by the ample spreads between the lending and the deposit rates enforced by the Chinese Central Bank (PBC)[5]. On the other hand, Chinese banks benefit from the high saving rates in China where savings add up to US$ 23 trillion compared to the second highest world savings, those of Japan (US$ 10 trillion as of 2016). Other developed countries with higher than average profitability include Canada (22%), Australia (18%), Japan (18%) and the United States (16%).

Figure 5: Average Profit Margin by Country of Origin for Telecommunications Companies in the Fortune Global 500 in 2015



Source: Authors and EMI analysis based on data from Fortune (n.d.), Fortune 500 Directory, http://fortune.com/global500/ (accessed May 2016).

Figure 6: Average Profit Margin by Country of Origin for Logistics Companies in the Fortune Global 500 in 2015



Source: Authors and EMI analysis based on data from Fortune (n.d.), Fortune 500 Directory, http://fortune.com/global500/ (accessed May 2016).

- In the *Automobile Industry* (Figure 4), Korean companies are a clear winner with a profit margin of 8%—twice that of the industry's global average of 4%. This is followed by Japan (6%), Germany (6%) and Canada (5%). A second E20 country, India, completes the Top 5 with a profit margin of 5%. The average profit margin of Chinese firms is at 3% and it is the same as the margin of companies from the United States and France. The high profitability in Korea is explained in large part by Hyundai Motors and its parent Hyundai Mobis with margins of 8% and 9% respectively. Hyundai has managed to achieve this due to sales volume growth aided by an international presence across United States, Latin America, Europe, China and India, in addition to an efficient management. However, recent financial results have shown that Hyundai's profits have fallen to a five-year low due to falling sales in China and discounts across the United States and Europe. It is interesting to note that Hyundai and Hyundai Mobis are two separate companies with Hyundai focusing on cars and Hyundai Mobis on parts and also supplies to another automotive company from Korea, Kia.

- In the *Telecom Industry* (Figure 5), MNCs from developed countries are much more profitable than eMNCs with Australia leading the way with a 16% profit margin—more than double the global average of 7%. Other countries with above average margins are the United Kingdom (13%) and the United States (8%). China and Mexico are the only E20 countries with companies in the Fortune Global 500; their companies have average profit margins of 5%, lower than the developed countries' companies in this industry. There could be a couple of reasons for lower profitability for the telecom industry in E20 countries.

  First, the telecom industry is highly capital intensive and it therefore takes much longer to recoup fixed costs, thus hampering profitability for the relatively young eMNCs. Additionally, consumers in emerging markets have lower purchasing power than their developed country counterparts. They are extremely price sensitive, thereby limiting the capacity of emerging multinationals to keep prices high, which in turn hinders profitability growth.

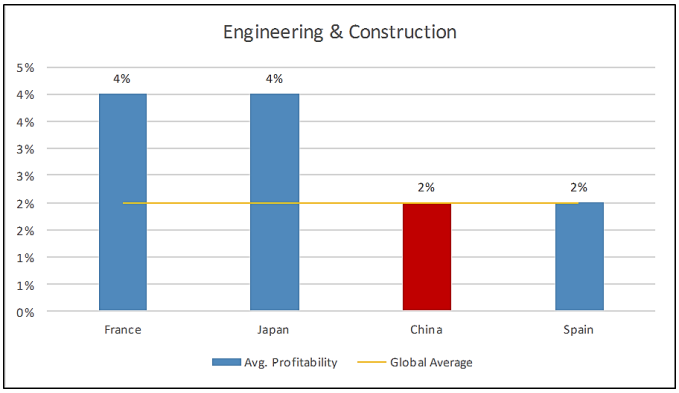
- In the *Logistics Industry* (Figure 6), Denmark is ranked highest with an average profit margin of 10%, double that of the global average of 5%, followed by the United States. China is the only E20 country represented in the Logistics industry on the Fortune Global 500; its companies have an average profit margin of 1%, significantly lower than the global average. Chinese companies in Logistics include China Ocean Shipping and the airline HN.
- In the *Engineering and Construction Industry* (Figure 7), Japan shares a top position with France, with an average profit margin of 4%. This is twice the average profits (2%) for all companies in the Fortune Global 500. China is the only E20 country represented in the industry in the Fortune Global 500, with companies having profit margins of 2%, equal to the average profit margins of companies from Spain.

- The *Mining and Crude-Oil Production Industry* (Figure 8), like Banking, is well represented by E20 countries with three of the top five countries with profit margins equal or better than the industry average in the Fortunel 500. Australia is far ahead of the pack with its companies having profit margins of 21%, more than ten times the average for all companies in the Fortune Global 500. The E20 countries on the list include Colombia (Ecopetrol) and India (Oil & Natural Gas Corporation) with companies registering a profit margin of 11%, as well as Brazil, with the state-owned company Petrobras having a profit margin of 2%. However, Chinese state-owned companies in this industry have profit margins as low as 1%.

- A look at the *Metals Industry* shows that the industry, with the fall of commodity prices, is weathering through a difficult period with average profit margins around 0% (break-even). In this scenario the profit margin of Japanese countries at 4% looks quite impressive. Companies from Korea, Germany and United States show a relatively decent profit margin of 1% compared with companies from China and Luxembourg, which show a negative margin of -1% (Figure 9).

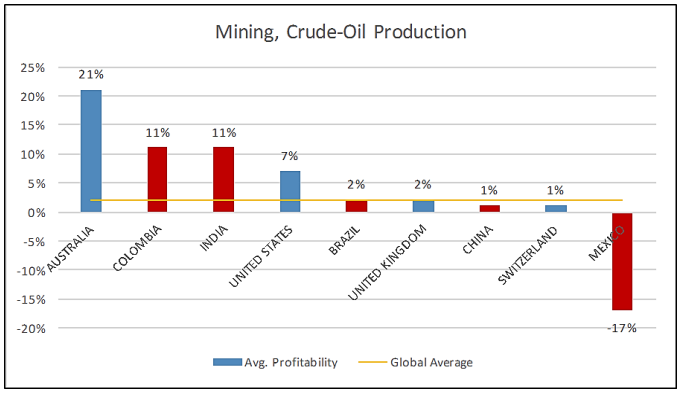
- Finally, in the *Petroleum Refining Industry*, companies from Russia and United States are leaders with profit margins of 6% and 5% respectively. Other E20 countries on the list are India (2%), China (2%) and South Korea (-1%).

Figure 7: Average Profit Margin by Country of Origin for Companies from the Engineering & Construction Industry in the Fortune Global 500 in 2015



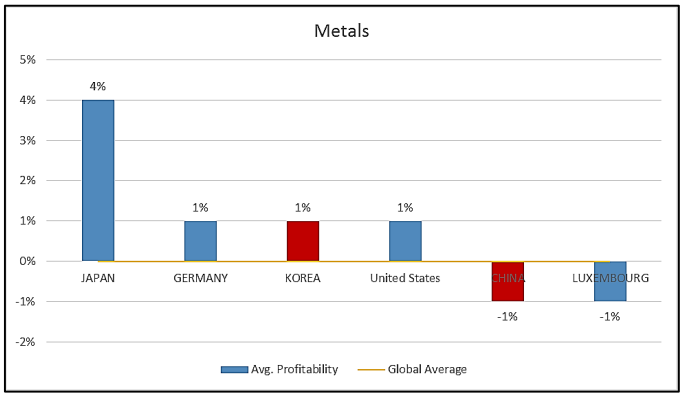
Source: Authors and EMI analysis based on data from Fortune (n.d.), Fortune 500 Directory, http://fortune.com/global500/ (accessed May 2016).

Figure 8: Average Profit Margin by Country of Origin for Companies from Mining, Crude Oil Production Industry in the Fortune Global 500 in 2015



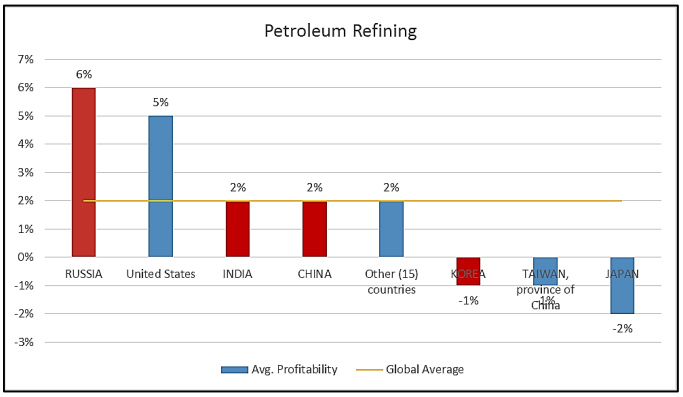
Source: Authors and EMI analysis based on data from Fortune (n.d.), Fortune 500 Directory, http://fortune.com/global500/ (accessed May 2016).

Figure 9: Average Profit Margin by Country of Origin for Companies from the Metals Industry in the Fortune Global 500h in 2015



Source: Authors and EMI analysis based on data from Fortune (n.d.), Fortune 500 Directory, http://fortune.com/global500/ (accessed May 2016).

Figure 10: Average Profit Margin by Country of Origin for Companies from Petroleum Refining industry in the Fortune Global 500 in 2015



Source: Authors and EMI analysis based on data from Fortune (n.d.), Fortune 500 Directory, http://fortune.com/global500/ (accessed May 2016)

4.2 Emerging Multinationals and Market Capitalization

As mentioned previously, eMNCs are becoming global leaders as measured by revenues. In terms of profits, the picture is mixed: while the averages are mostly lower, in certain industries E20 firms perform better. The picture is even more mixed with regards to market capitalization, which is characterized by more volatility. In the last ten years, the Chinese ICBC, Sinopec, China National Petroleum and State Grid, the Brazilian Petrobras and the Korean Samsung have all at some point been part of the world's largest fifteen companies by market capitalization. By the end of 2015, the situation has changed significantly and only one company (ICBC from China) features among the top fifteen most valuable companies, with the top ten all based in the United States.

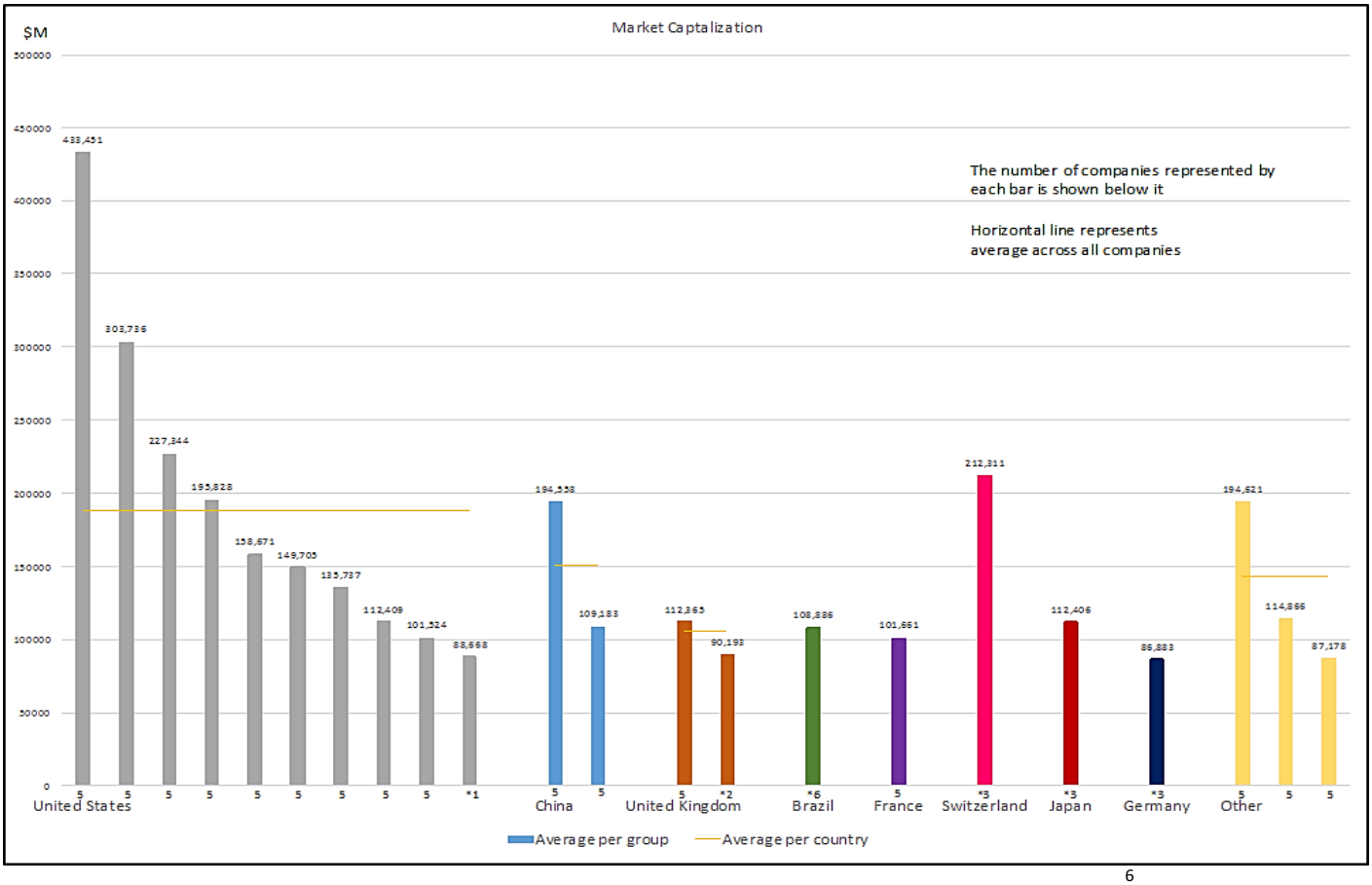
Table 2: Number of companies in the Top 100 by market capitalization

Country	*Count*
United States	51
China	10
United Kingdom	7
Brazil	6
France	5
Switzerland	3
Japan	3
Germany	3
Others	12

Source: Authors and EMI analysis based on data from S&P Capital IQ – Top 100 companies by Market Cap (accessed July 2016).

As of July 2016 and according to data from Capital IQ, when considering the top 100 largest firms by market capitalization, fifty-one were from the United States, and seventeen from E20 countries: ten from China (ICBC, ranked 15th; Tencent, 23rd; Petrochina, 27th; Alibaba, 29th; China Construction Bank, 32nd; Agricultural Bank of China, 40th and Bank of China, 47th; China Petroleum & Chemical Corp, 90th; Ping, 93rd and China Life Insurance Co, 99th), six from Brazil (five are Index funds and the Brazilian subsidiary of InBev, Ambev SA,) and one from Korea (Samsung, 37th). This underscores the strength of the US stock markets. While there are twenty-seven eMNCs among the 100 biggest by revenues, there are only seventeen among the biggest by market capitalization. A caveat should be noted: so far, equity finance is more prominent in developed countries

Figure 11: Distribution of Market Capitalization by Country of Origin for Top 100 Companies by Market Capitalization in July 2016



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Source: Authors and EMI analysis based on data from S&P Capital IQ – Top 100 companies by Market Cap (accessed July 2016).

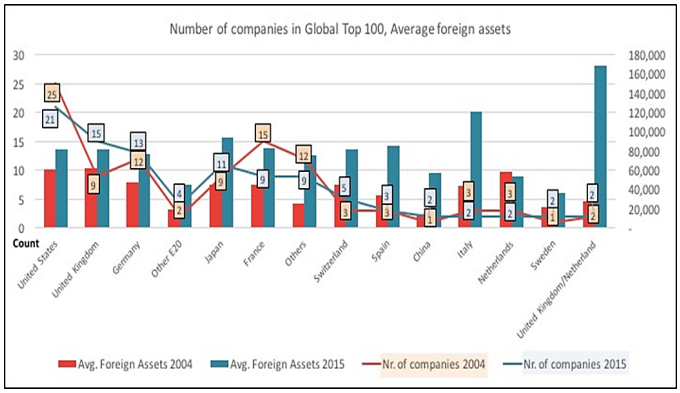
(mainly the United States and the United Kingdom) than in emerging economies where it is more common that companies resort to debt financing.

In the Banking Industry with US$ 303.78 billion in market capitalization in June 2015, the Chinese bank ICBC was the most valuable bank by market capitalization in the world, well above the biggest US bank, Wells Fargo that occupied the second spot at US$ 288.56 billon. The third spot was held by China Construction Bank with US$ 252.73 billion, followed by the US Bank JP Morgan Chase at US$ 245.2 billion and Bank of China with US$ 209.16 billion (S&P Capital IQ, June 2015). Overall, China and the US had the largest number of banks in terms of market capitalization, with each having four of the top ten banks.

But the market capitalization of global banks started changing from July 2015 so that, in July 2016, Wells Fargo had become the most valuable bank by market capitalization with US$ 245.42 billion. The second spot was held by JPMorgan Chase & Co with market capitalization of US$ 233.41 billion. ICBC, the largest bank from China had dropped to number three (US$ 225.57 billion), followed by China Construction Bank (US$ 163.81 billion) and Agricultural Bank of China (US$ 152.30 billion)[7]. Though China still has four banks in the top ten, the market capitalization of these banks has declined significantly, which has brought about a clear change in sentiment with respect to the prospects of Chinese banks.

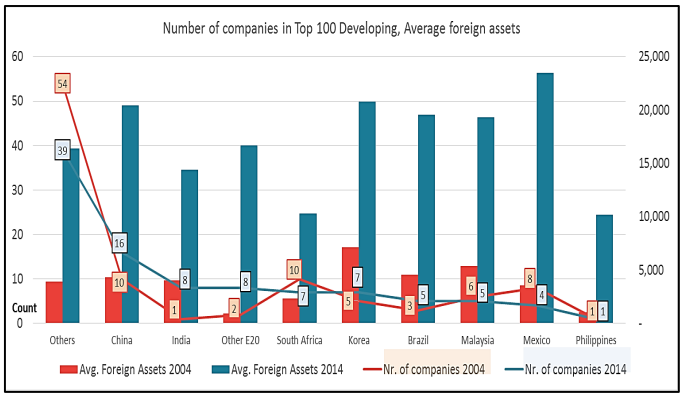
The development of stock exchanges in some emerging economies such as China may help increase the market value of emerging multinationals. According to the World Bank[8], the Chinese stock

Figure 12: Number of Companies and Average Foreign Assets for Companies in UNCTAD List for Global Top 100 Companies by Foreign Assets



Source: Authors and EMI analysis based on data from UNCTAD list of top 100 companies by Foreign Assets, WIR 2016 annexure (accessed June 2016).

Figure 13: Number of Companies and Average Foreign Assets for Companies in UNCTAD's list for Top 100 Companies by Foreign Assets



Source: Authors and EMI analysis based on data from UNCTAD WIR 2016 annex (accessed June2016).

market reached US$ 8 trillion in value in 2015, less than a third of the US$ 25 trillion of the American NYSE and the NASDAQ, but the third in the world. Emerging markets' financial power may also be further tapped through the creation of multilateral organizations such as the Asian Infrastructure Investment Bank (AIIIB), the first international financial institution launched by a developing country (China), and the New Development Bank, operated by the BRICS states (more on these two institutions in Chapter 1).

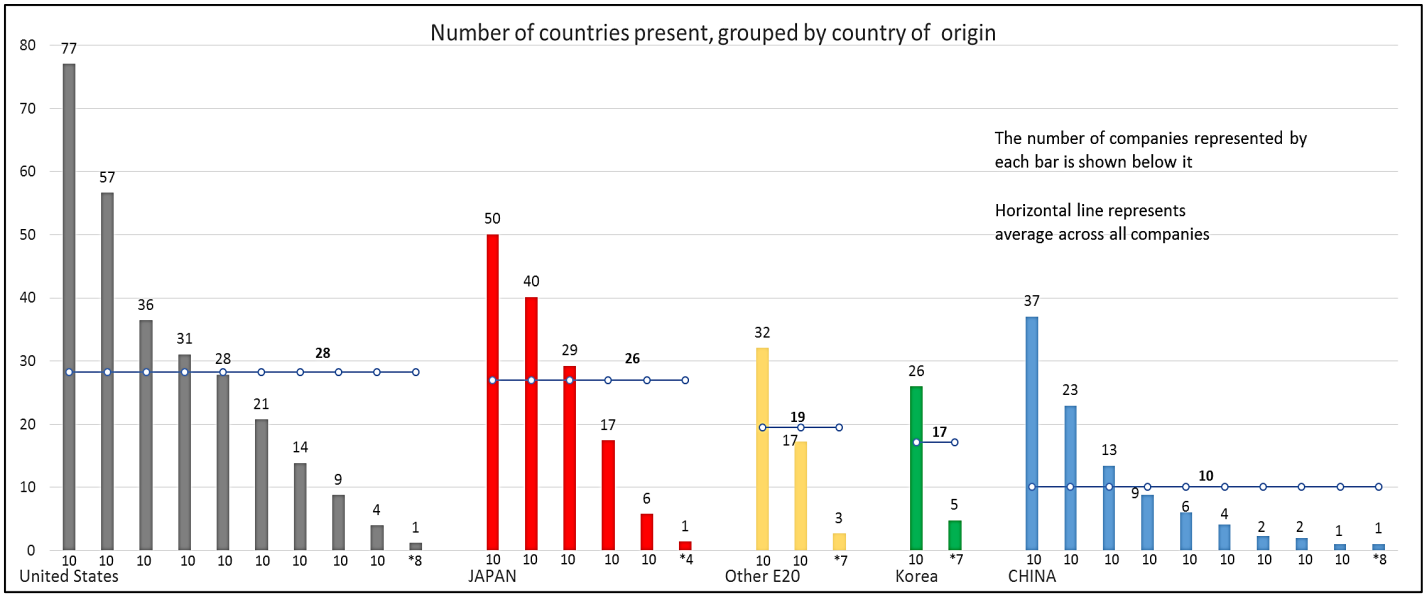
In order to further understand how companies from different emerging and developed countries compare with regards to market capitalization, we assessed the average market capitalization per country. We examined the Top 100 companies (by market cap) and combined them into groups of five in order to be able to represent all 100 companies on a single graph.[9] The analysis is shown below.

The average market capita of US companies is higher than those of firms from E20 countries like China and Brazil. MNCs from the United States have an average market capitalization of US$ 1.88 trillion and those from Switzerland US$ 2.12 trillion. By comparison, companies from China only have a market cap of US$ 1.51 trillion and those from Brazil of US$ 1.08 trillion. Figure 11 above shows clearly that the gap is quite wide between the market capitalization of the ten biggest American companies and those of the rest of the world. There is a concentration of power in the five biggest firms by market capitalization, which are all American (Apple, Alphabet, Microsoft, Exxon Mobil, Berskshire Hathaway) and three of them technology companies. The gap is wide between the US companies and eMNCs. Only the five top Chinese and Brazilian companies are comparable.

4.3 Internationalization of eMNCs

As described above, Emerging Multinationals are growing and their presence is increasingly being felt among the largest in term of revenues, albeit less in terms of profit margins and market capitalization. We now consider their international presence. Are eMNCs truly multinationals or merely big players in their home markets? In this section we examine the trend in their internationalization by studying their foreign assets and the number of countries in which they are present.

Figure 14: Presence in countries for selected companies in Fortune Global 500 (2015) by country of origin



Note: The number below each bar indicates the number of companies for that bar.
For each company, the number of countries refer to the number of countries including its home country.

Source: Authors' calculation and EMI analysis based on data from Fortune (n.d.), Fortune Global 500 Directory, http://fortune.com/global500/ accessed July 2016), data from https://johnson.library.cornell.edu/databases/Capital IQ.

A) International Companies by Foreign Assets

The most international non-financial company in the world in 2015, based on foreign assets, was the British/Dutch mining and petroleum company Royal Dutch Shell, followed by the Japanese Toyota, the American General Electric (GE), the French Total SA and the British BP PLC[10]. United States, Europe and Japan dominate with eighty-nine multinationals among the top 100 multinationals, based on foreign assets[11]. This is perhaps not surprising considering that some of these companies like GE or Shell were born more than hundred years ago and started their internationalization process decades ago. By comparison, many of the big eMNCs are still young companies. They have grown in size mainly since the early 2000s and only recently have they acquired the size and the needed capabilities to internationalize.

Data on outward foreign direct investment stock from the E20 (11% of the world stock, for instance)[12] indicate that internationalization has begun but is still incipient. There were indeed six eMNCs from the E20 among the world's top 100 non-financial multinationals, ranked by foreign assets, in 2015[13], including two Chinese (China National Offshore Oil and China Ocean Shipping); one Brazilian (Vale); one Malaysian (Petronas – Petroliam); one Mexican (América Móvil SAB de CV) and one Korean (Samsung Electronics Co.). The numbers have doubled since 2004, however: at that time, there were only three eMNCs: Petronas from Malaysia (59th), Samsung from the Republic of Korea (86th) and CITIC from China (94th). And the position in the ranking has also improved significantly.

If we consider the list of the 100 Top non-financial multinationals from developing and transition economies ranked by foreign assets[14] in 2014, China is the champion among the E20 with 16 companies in the list, followed by India (eight), Korea and South Africa (seven each), Brazil and Malaysia (five), Mexico

Figure 15: Average number of countries including home country

Country or group	Average number of countries (including the home country)
100 biggest companies from US	28 (8 companies in only 1 country)
All Japanese companies	26
All *Other E20* companies	19
All Korean companies	17
All Chinese companies	10 (18 companies in only 1 country, their home country)

(four), Russia (two) and Saudi Arabia, Argentina and Thailand (one each). In 2004, the same ranking was dominated by Hong Kong, China with twenty-five multinationals and Singapore with ten. In the last ten years, these two economies, as well as South Africa and Mexico, have lost ground, while China and India have improved in the internationalization of their business sector.

It seems that while some emerging multinationals are new in the international arena, there is still a bigger presence of smaller countries in both developed and developing countries rankings. Countries like Singapore, Switzerland, Hong Kong (China) for instance have a significantly large number of entries. Even the United States has only twenty-one companies in the list of the top 100 non-financial multinationals[15].

B) Emerging Multinationals Going International

An important metric to understanding the internationalization of multinational companies is their "Global presence", measured in the number of countries (other than the home country) in which a company has subsidiaries (Figure 14). For this analysis, we drew from the S&P's data source Capital IQ accessed on 19 July, 2016[16] and proceeded as follows:

1. We identified the two countries from E20 with the largest representation in the Fortune Global 500, namely China and Korea. We grouped together all companies from other E20 countries as *Other E20.* We compared these groups with companies from the top two G7 countries, the United States and Japan. Since China had only 98 companies we included in this analysis only the top 98 US companies and all Japanese (as per Fortune Global 500 ranking).
2. We then researched the number of subsidiaries for each company according to Capital IQ.
3. We grouped these companies into sets of 10. Each bar represents 10 companies unless mentioned otherwise. For every country the bars will be organized by decreasing order of globalization: the one to the left includes the most global companies and the last one (to the right) the least global companies. In addition, since the number of companies per country was not a multiple of 10, the last bar to the right will always have less than 10 companies. The number of companies for each bar is included in the graph.
4. We also calculated the average number of countries in which the companies of each country are present.

Figure 14 and 15 show that companies from the United States and Japanese companies are present in an average of twenty-eight and twenty-six countries respectively. In comparison, companies from the *E20* are present in a smaller number of countries on average: Korean companies in seventeen countries and China in ten while for the Other *E20 countries*[17] the companies listed are in an average of nineteen countries. It is interesting to note, though, that the top 10 Chinese MNCs in the Fortune 500 are present in 20 countries on average, which compares with 25 countries for the top 10 U.S. MNCs.

Chinese companies, however, are making strides in internationalization: indeed, according to data from Capital IQ retrieved in 2016, the number of Global 500 Chinese companies with presence in four countries (three outside China) totals sixty. This compares with five Chinese firms present in three or more countries, based on data from Global 500 published in 2012, and qualified as "truly international" according to data presented by Rugman (Rugman, 2014[18]).

The analysis above, based on Fortune Global 500 companies and Capital IQ data, suggests the following:

- Except for a few (8% in the case of American and 18% in the case of Chinese), the great majority of big companies in Fortune Global 500 are multinationals (i.e., present in two countries or more), as expected.

- US companies are present in an average number of countries that is almost triple that of Chinese firms.

- Though still at a distance from their US and Japanese counterparts, Korean companies and those from the Other E20 have a relatively sizable international presence (the average number of countries in which those firms are present for instance is about 65% of the average for US).

- Chinese companies, which are much younger on average than American ones (see Chapter 5), have a wider geographical footprint than previously thought.

- Overall, unlike what is quite commonly thought, the global footprint of emerging multinationals is larger than expected.

Conclusions

As we close this analysis, we observe that emerging market multinationals still have some way to go in terms of profits, market capitalization and international presence compared to the more established western multinationals.

Overall, the average profit margins of emerging market multinationals lag behind their US and Japanese counterparts. Emerging multinationals appear to be looking for growth in revenues rather than profit margins for the moment. The differences are relatively significant, whether one considers the E20 firms as a whole or at the industry level. There are, however, some notable exceptions such as Chinese firms in Banking and Korean ones in Automobiles.

Although in the past two years, they were neck to neck, the gap between older/western and newer/emerging multinationals has become wider as it pertains to market capitalization. Emerging multinationals display a lower market capitalization on average than, for instance, US firms. Will emerging multinationals close this gap? It remains to be seen because of the different financial cultures and contexts in which they operate. While stock markets are the main source of corporate finance in the United States, most eMNCs use corporate debt.

Regarding geographical expansion, emerging market multinationals are not as international as leading American and Japanese companies, but they are becoming increasingly so. European and American companies dominate the UNCTAD rankings by foreign assets but, if we consider the number of countries in which firms are present, the picture is different. For American companies, that number on average is triple that of Chinese firms; the difference is much less with the rest of emerging multinationals. In addition, the difference is also less marked between the very top US and Chinese multinationals. Overall, unlike what is

quite commonly thought, the global footprint of emerging multinationals is larger than expected and this will most likely continue to grow in the future. In the next chapter, we turn to the growing Chinese presence in international Mergers and Acquisition.

Notes

[1] We calculate profit margins by dividing profits by revenues.
[2] Defined as Motor vehicles and parts in the Fortune Global 500.
[3] Calculated by adding airlines, railroads and shipping in the Fortune Global 500.
[4] Banking, Petroleum Refining, Automobile and Mining have the maximum number of companies in Fortune 500.
[5] It remains to be seen if the Chinese banking sector will maintain this high level of profits, given the policy changes being put in place for more liberalization in the sector and the current economic slowdown.
[6] Among the top 100 companies, 17 are from E20 countries: China (10), Brazil (6) and Korea (1). The rest are as follows: the United States (51), the United Kingdom (7), France (5), Switzerland (3), Japan (3), Germany (3) and other (11) which includes companies from Hong Kong, Belgium, Korea, Denmark, Taiwan, Ireland, Spain, Australia, Netherland and Canada
[7] Source: S&P Capital IQ, July 2016.
[8] http://data.worldbank.org/indicator/CM.MKT.LCAP.CD accessed by July 2016.
[9] It should be noted that we had to round off wherever the number, which was not a multiple of five (for e.g. Japan has only three companies but one bar) and the total number of bars is 22 and not 20. The number of companies in each group is shown under each bar and wherever the number of companies is other than 5, it is marked with an '*'
[10] Based on the ranking by foreign assets by UNCTAD of the world top 100 non financial multinational corporations, *http://topforeignstocks.com/2014/09/16/the-worlds-top-100-non-financial-tncs-ranked-by-foreign-assets/* Accessed by July 2016.
[11] Ibid
[12] See chapter 2 in this report
[13] UNCTAD, The world top 100 non-financial TNC, op.cit.
[14] Source: UNCTAD, the top 100 non-financial MNEs from developing countries and transition economies ranked by foreign assets 2014, WIR 2016, table 25, available at http://unctad.org/en/Pages/DIAE/WorldInvestmentReport/Annex-Tables.aspx. Hong Kong, China considered by UNCTAD as a developing country has 18, Singapore has 10 and Taiwan, province of China 8 but those countries are not considered in this study as part of the E20.
[15] UNCTAD, The world top 100 non-financial TNC, op.cit.
[16] We choose this data base over other ones like Mergent Online and Hoover's Online because of its wider coverage of Emerging Multinationals.
[17] Other E20 are Russia, Brazil, India, Mexico, Thailand, Chile, Indonesia, Malaysia, Poland, Colombia and Saudi Arabia, see Appendix 1. Information on the international presence of 5 of the 31 companies from these countries was not available in Capital IQ, see Appendix 1.
[18] Source: Rugman, Alan and Quyen T.K Nguyen (2014) « Modern International business theory and emerging market multinational companies », in Cuervo-Cazurra and Ravi Ramamurti (2014) « Understanding Multinationals from Emerging Markets », Cambridge University Press. Some authors consider a company to be multinational when it is present in three or more countries and has 10 percent foreign sales, as does Rugman. Rugman also states that more than half of all world trade and about 80 of the foreign direct investments are made by the Fortune Global 500 companies. In this report, however, we follow UNCTAD's criteria and consider a company to be multinational if it is present in a country beyond its home country. Further work considered has been Casanova (2009), Cuervo-Cazurra (2012), Dunning (2005), Fleury and Fleury (2012) and Guillén and García-Canal (2012).

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Chapter 5

China – An Emerging Global Acquirer

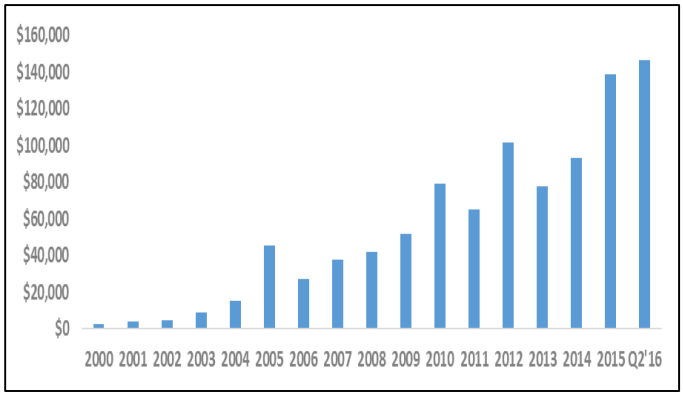
In the previous chapters, we discussed Emerging market multinationals and their evolution in an increasingly globalized world. In this chapter, we discuss in more detail how China specifically has become a leading global acquirer, what countries and industries it is investing in and what is driving those investments. We focus specifically on Mergers and Acquisitions (M&A)[1] data. In the second part of this chapter, we compare top U.S.A. and Chinese companies in some of the major industrial sectors such as Banking, Petroleum, Automotive and Metals.

5.1 Chinese Outbound M&A activity[1]

In the previous chapters, we have discussed how the Chinese Outward Foreign Direct Investment (OFDI) has grown rapidly over the last decade and shown the key role that China is playing today in outbound investments globally.

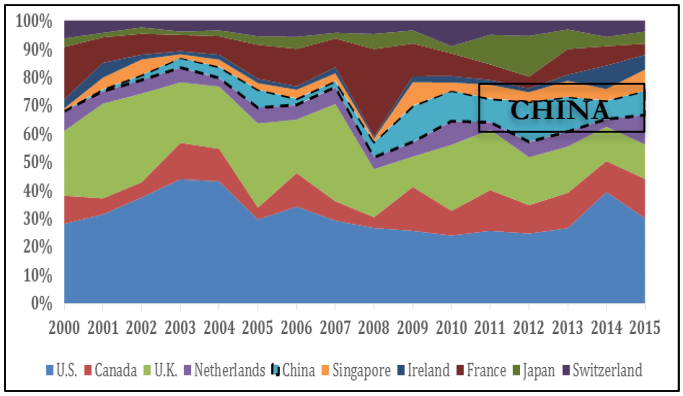
We now turn our focus to Chinese M&A activity abroad. Like outbound Greenfield investments, outbound M&A transactions have been an important driver of Chinese OFDI. Indeed, M&A is a significant tool for acquiring knowledge, technical expertise, natural resources, customer base and talent – all of which can otherwise be difficult and time-consuming to develop internally. As previously discussed, with the help

Figure 1: Value of announced Chinese Outbound M&A deals (2000 – Q2'16)



Source: Authors' analysis based on data on M&A Transactions originating from China and Hong Kong ($ value in millions) from Capital IQ. 2016 data includes deals announced through 6/16/2016.

Figure 2: Outbound Announced M&A Deals from China as % of the Value of Total Outbound M&A deals by Top 10 Countries



Source: Authors' analysis based on data on announced outbound M&A transactions from S&Ps Capital IQ[2] China's figures include transactions made by both China and Hong Kong based companies

of government initiatives and policies, such as the Silk Road Economic Belt and the 21st century Maritime Silk Road and regulatory revisions enacted in the beginning of 2015 easing restrictions on state owned enterprises (SOEs) to invest overseas, more Chinese companies have been investing in new industries in an increasing number of countries.

A) Chinese Outbound M&A Post Financial Crisis

The dollar value of total Chinese outbound M&A transactions has increased significantly over the last decade, and especially since the global financial crisis (GFC) of 2007-08.

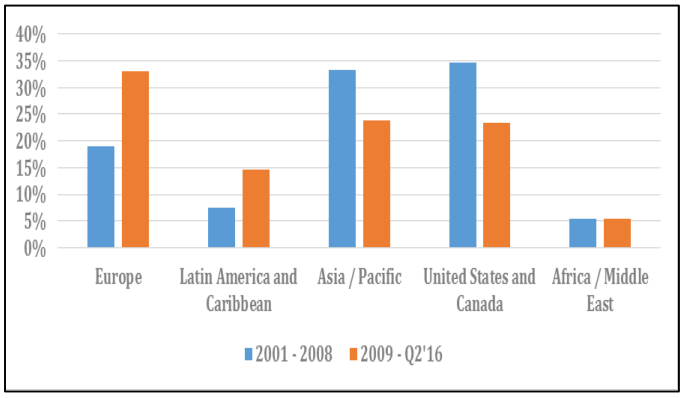
This increase has been driven by vibrant M&A activity of large Chinese multinationals[2] as well as smaller companies. This surge in M&A activity has been fueled by technology and knowledge-driven acquisitions in the developed markets, as well as natural resource driven acquisitions in Latin America and other parts of the world, which we discuss further in section 5.1.2. Other factors driving Chinese investments abroad have been a desire for market diversification and adding international valued brand names (as it was the case of Lenovo's acquisition of IBM's personal computer's division in 2005) to their portfolio. Outbound M&A also helps Chinese firms establish new marketing and distribution channels. Lastly, cheap currency valuations in many developed markets, especially Europe, has also made the foreign targets cheaper, boosting the outbound M&A activity from less than $40 billion in 2007 to over $140 billion in 2016 (year to date). In fact, by June 2016, the value of announced M&As already exceeded the value achieved for the full 2015 year ($138 billion).

As Figure 1 shows, China has become an important source of outbound M&A deals. We considered the Top ten outbound FDI investors (FDI outflows)[3] based on UNCTAD data for 2013, 2014 and 2015, and examined their outbound M&A activity to discover the Top ten countries by outbound M&A activity in 2015. This top ten list includes United States of America, Canada, United Kingdom, Netherlands, China, Singapore, Ireland, France, Japan and Switzerland. Together they accounted for $1.6 trillion dollar of cross-border M&A in 2015. As shown in Figure 2, the total value of deals that originated in China as a percentage of the total value of deals that

Figure 3: Value of Announced Outbound M&A deals (2000 vs. 2015) US $ millions

Source: Authors' analysis based on data on M&A Transactions from Capital IQ

Figure 4: Geographic Distribution of Announced Chinese Outbound M&A deals (% of Total Value)



Source: Authors' analysis based on data from Capital IQ M&A Transactions (based on $ value in millions)

originated from these Top 10 countries increased from less than 1% in 2000 to 9% in 2015. The U.S.A. accounted for 30% of the total value of outbound M&A by these Top 10 countries, followed by Canada at 14%, the U.K. at 12%, Netherlands at 11% and then China at 9%.

In 2000, China virtually had no outbound M&A (Figures 2 and 3). In 2015, the value of its announced outbound M&A ($138 billion) placed it in the 5th position overall, between Singapore ($121 billion) and Netherlands ($171 billion), but still far behind the U.S.A., ranked number 1 ($488 billion). The United States, Canada, Netherlands and Singapore also showed a remarkable increase in the outbound M&A activity since 2000. The value of outbound M&A investment by Canada and Netherlands (Figure 3), for instance, more than tripled from 2000 to 2015, while outbound M&A by the United States more than doubled during the same period.

Increased Chinese outbound M&A activity is also very strongly reflected in the list of prominent transactions over the last year. Appendix 5.1 lists the Top 100 Outbound M&A transactions globally between July 1, 2015 and June 30, 2016. This list excludes announced transactions made by consortium of investors from multiple countries. It is interesting to note that seventeen of the Top 100 global transactions originated from China, the biggest number of deals by a single country. The $43 billion announced acquisition of Syngenta by China National Chemical Corporation ("ChemChina") in February, 2016 was the fourth biggest overseas deal by any company between July 1, 2015 and June 30, 2016. The top three overseas M&A deals included American pharmaceutical Pfizer's proposed $160 billion merger with the Irish Allergan, the American beer company Anheuser Busch's announced $107 billion takeover of the British SAB Miller and German Bayer AG's announced $62 billion acquisition of the US agrochemicals company Monsanto Company. After China, the countries most active in overseas M&A activity during this period were the United States (fifteen of Top 100 announced deals), Canada (twelve announced deals), Germany (seven announced deals), followed by the U.K. and France (six announced deals each).

B) Geographic Distribution of Chinese Outbound M&A

The mix of destination countries of Chinese M&A activity has changed significantly since the

Figure 5: Announced Top Deals by China in the First Half of 2016 (Ranked by Date of Announcement)

	Transaction Value ($USDmm)	Geographic Region [Target]	Primary Sector [Target]	Target	Buyers
06/14/2016	2,750	Europe (Netherlands)	Information Technology	NXP Semiconductors NV, Standard Products Business	Beijing JianGuang Asset Management Co., Ltd.; Wise Road Capital Ltd.
05/09/2016	2,770	Africa (DRC)	Materials	TF Holdings Ltd.	CMOC Limited
04/28/2016	1,500	Latin America and Caribbean (Brazil)	Materials	Anglo American Nióbio Brasil Limitada and Anglo American Fosfatos Brasil Limitada	China Molybdenum Co., Ltd. (SEHK:3993)
04/19/2016	3,741	U.S.	Information Technology	Lexmark International Inc. (NYSE:LXK)	Legend Capital; PAG Asia Capital; Apex Technology Co., Ltd. (SZSE:002180)
04/11/2016	2,016	Europe (Switzerland)	Industrials	gategroup Holding AG (SWX:GATE)	HNA Group Co., Ltd.
03/31/2016	1,861	Europe (France)	Consumer Discretionary	SMCP S.A.S.	Shandong Ruyi Science and Technology Group Co., Ltd.
03/16/2016	8,275	U.S.	Financials	Strategic Hotels & Resorts, Inc.	Anbang Insurance Group Co., Ltd.
02/17/2016	7,247	U.S.	Information Technology	Ingram Micro Inc. (NYSE:IM)	Tianjin Tianhai Investment Co., Ltd. (SHSE:900938)
02/04/2016	1,608	Europe (Germany)	Utilities	EEW Energy from Waste GmbH	Beijing Enterprises Holdings Ltd. (SEHK:392)
02/03/2016	43,000	Europe (Switzerland)	Materials	Syngenta AG (SWX:SYNN)	China National Chemical Corporation
01/15/2016	5,400	U.S.	Consumer Discretionary	GE Appliances Inc.	Qingdao Haier Co., Ltd. (SHSE:600690)
01/11/2016	3,500	U.S.	Consumer Discretionary	Legend Pictures, LLC	Dalian Wanda Group Co Ltd

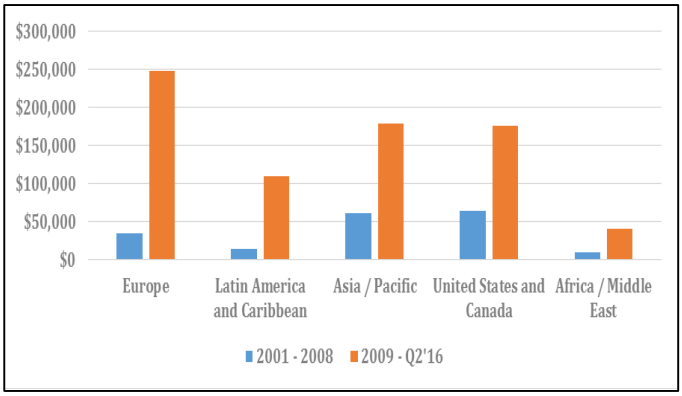
Source: Authors' analysis based on M&A Transactions data from Capital IQ

financial crisis. China's outbound M&A activity since 2008 has been more focused on companies based in Europe and Latin America than those in other regions such as Asia-Pacific and U.S.A./Canada. Europe accounted for about 33% of the total value of M&A deals between 2009 and mid-2016, compared to about 19% between 2000 and 2008, i.e. in the pre-crisis period (Figure 4). As well, the share of Latin America in the total value of outbound M&A deals from China increased from about 8% in the pre-crisis period to 15% following the crisis (Figure 4). This shift towards Europe and Latin America has primarily been driven by cheap euro and technology and market-seeking acquisitions in Europe and natural resources and recent currency devaluations in Latin American countries (Figure 5 provides a list of top M&A deals by China in the first half of 2016). Africa and the Middle East remain less important target regions as regards to Chinese M&As. In addition, there have also been M&As in Europe by financial investors from China, which are not accounted in the figure 4. For example, in one of the biggest acquisitions in 2016, a consortium of Chinese financial investors consisting of Beijing Jianguang Asset Management Co., Ltd ("JAC Capital") and Wise Road Capital LTD ("Wise Road Capital") announced the purchase of Standard Products business from Netherlands-based semiconductor company, NXP Semiconductors N.V. for $2.75 billion.

Some other prominent recent M&As besides the above mentioned Syngenta deal are the announced purchase of Swiss air-travel logistics company gategroup Holding AG for $1.5 billion by China based HNA Group Co., Ltd. in April 2016 and the announced sale by South African/British Anglo American plc ("Anglo American") of its Niobium and Phosphates businesses in Brazil to China Molybdenum Co. Ltd ("CMOC") for a reported total cash of $1.5 billion in April 2016. The natural resources based deals in Latin America by China in the recent years have been fueled by a desire to seek diversification and internationalization opportunities in the resources industries. On the other hand, some of the acquisitions in Europe reflect China's strategic plan to be much more focused on technological innovation.

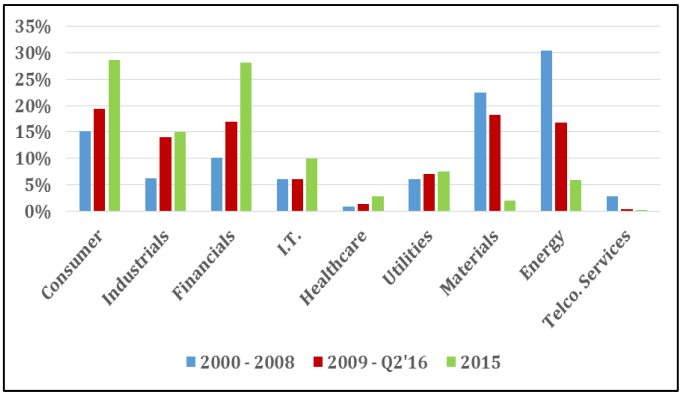
While the geographic distribution of Chinese outbound M&A has shifted significantly towards Europe and Latin America (Figure 4), the overall dollar

Figure 6: Geographic Distribution of Chinese Outbound M&A deals (US $ millions)



Source: Authors' analysis based on data from Capital IQ M&A Transactions

Figure 7: Industry Distribution of all Chinese Outbound M&A deals (%)[1]



Source: Authors' analysis based on data from Capital IQ M&A Transactions (based on $ value in millions)

value of M&A activity (Figure 6) has increased in all regions. M&A investments in Europe increased six-fold from 2001-2008 to 2009-2016, Latin America increased approximately seven-fold, Africa/Middle East approximately three-fold and the United States and the Asia-Pacific approximately two-fold in the same period.

C) Industry Distribution of Chinese Outbound M&A

The industry distribution[4] of Chinese outbound M&A has also changed in recent years. Prior to the global financial crisis, the majority of Chinese investments abroad were focused on the Energy and Materials[5] sectors. The Energy (30%) and Materials (22%) sectors together accounted for 52% of total transaction value of all announced Chinese M&A between 2000 and 2008, and in comparison, Industrials[6] (6%), Financials (10%) and Consumer[6] (15%) sectors transactions were smaller in value. This has changed since the GFC, with the deals made between 2009 through the second quarter of 2016 having a more uniform distribution among industries. Energy (17%) and Materials (18%) accounted for 35% of the total value of deals between 2009 and 2016, while other sectors such as Industrials (14%), Financials (17%) and Consumer (19%) have all increased as a percentage of total deals. Furthermore, in 2015, over 80% of the Chinese outbound deals were in Consumer, Industrials, Financials and Information Technology sectors.

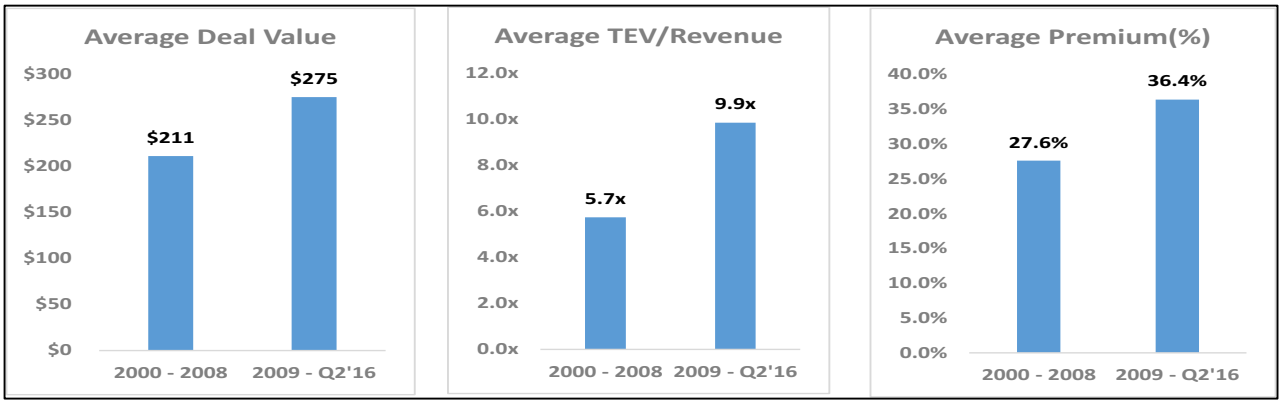
D) Bigger and Expensive Deals

Besides the overall value of deals and the countries and industries in which China is undertaking M&As, an examination of the average deal value, valuation ratios as well as acquisition premiums[7] paid by Chinese companies can contribute to get a better picture of the recent Chinese outward M&As expansion. To this end, we compared data on M&A deals[8] for two time periods 2000–2008 and 2009-2016 (i.e. the post-GFC period). Based on available information, the following conclusions can be made.

First, along with the increase in the overall value of deals, the average deal size also increased from $211 million in 2000-2008 to $275 million in 2009-2016 (Figure 8).

In addition, as the value of deals has increased, they have also become more expensive, and Chinese companies have been willing to pay a higher price for the targeted assets. Some valuation metrics commonly used in M&A transactions are TEV/Revenues[9] and Price/Earnings ratios. TEV and Price (in case of public companies) are measures of the total value of the firm. Put simply, the higher these ratios, the higher an acquirer is willing to pay for the target. We analyzed the TEV/Revenue ratios for Chinese overseas transactions for the periods mentioned above. The

Figure 8: Price and Valuation of Chinese Outbound M&A Deals (2000 – Q2'16)



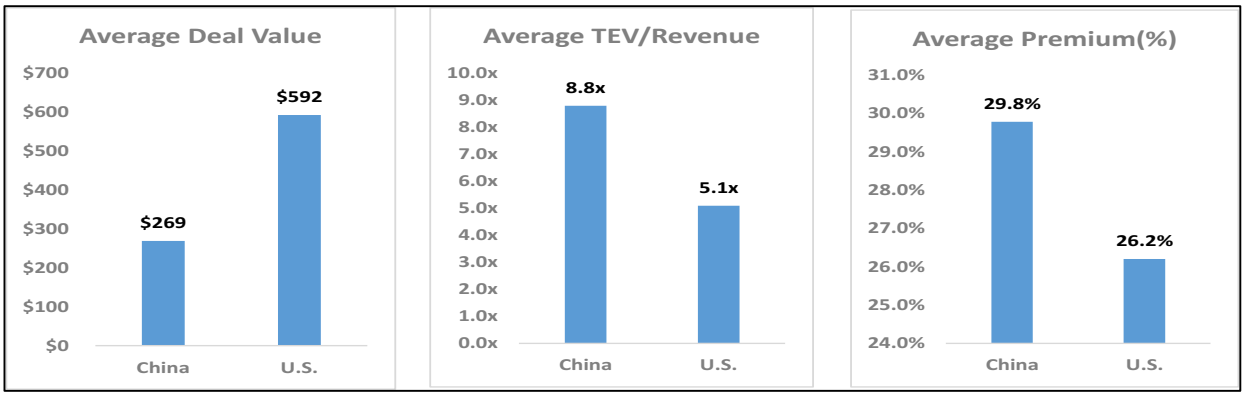
Source: Authors' analysis based on Capital IQ data on M&A Transactions

Average TEV/Revenue ratio increased from 5.7 in 2000-2008 to 9.9 in 2009- June 2016 (Figure 8).

Finally, for the publicly traded M&A targets, average acquisition premium (based on prior week price of the publicly traded target company) increased from 27.6 percent to 36.4 percent.

We also compared the Chinese outbound M&A deals with the US ones (Figure 9). While the M&A deals China has done in recent years have been bigger than in the past, they are still small compared to the US outbound deals. For instance, the average deal size for the U.S.A. in 2015 was $592m compared to $269m for outbound Chinese deals. Average acquisition premiums paid by both Chinese and US companies were more comparable, with an average acquisition premium between 25 to 30 percent in 2015. The higher average TEV to Revenue ratio for Chinese deals could reflect the mix of deals. Indeed, smaller deals tend to have higher revenue ratios and China had a higher percentage (70%) of smaller deals (less than $100 million) than the United States (63%). Another reason for higher Chinese premiums could be that Chinese companies are likely to be less known compared to US companies and therefore may be facing some resistance from sellers demanding higher premiums as it happens sometimes with other Emerging Markets Multinationals.

Figure 9: Price and Valuation of China and U.S.A Outbound M&A Deals (2015)



Source: Authors' analysis based on Capital IQ data on M&A Transactions

Figure 10: Comparison of Top 10 Chinese and US Firms in Fortune Global 500 List

Top 10 Chinese Companies (Fortune 500)	Rank 2015	Revenue $ million	Profit $ millions	Profit Margin	Number of countries present in	Founding Year	Ownership
SINOPEC GROUP	2	446,811	5,177	1%	34	1998	Publicly Traded Company; State-Owned
CHINA NATIONAL PETROLEUM	4	428,620	16,359	4%	29	1988	Private Company; State-Owned
STATE GRID	7	339,427	9,796	3%	13	2002	Private Company; State-Owned
INDUSTRIAL & COMMERCIAL BANK OF CHINA	18	163,175	44,763	27%	34	1984	Publicly Traded Company; State-Owned
CHINA CONSTRUCTION BANK	29	139,933	36,976	26%	22	1954	Publicly Traded Company; State-Owned
AGRICULTURAL BANK OF CHINA	36	130,048	29,126	22%	11	1979	Publicly Traded Company; State-Owned
CHINA STATE CONSTRUCTION ENGINEERING	37	129,887	2,079	2%	12	1957	Publicly Traded Company; State-Owned
BANK OF CHINA	45	120,946	27,525	23%	29	1912	Publicly Traded Company; State-Owned
CHINA MOBILE COMMUNICATIONS	55	107,529	10,451	10%	4	1997	Publicly Traded Company; State-Owned
SAIC MOTOR	60	102,249	4,540	4%	8	1955	Publicly Traded Company; State-Owned

Top 10 U.S. Companies (Fortune 500)	Rank 2015	Revenue $ millions	Profit $ millions	Profit Margin	Number of countries present in	Founding Year	Ownership
WAL-MART STORES	1	485,651	16,363	3%	20	1962	Publicly Traded Company
EXXON MOBIL	5	382,597	32,520	8%	31	1870	Publicly Traded Company
CHEVRON	12	203,784	19,241	9%	31	1879	Publicly Traded Company
BERKSHIRE HATHAWAY	14	194,673	19,872	10%	31	1839	Publicly Traded Company
APPLE	15	182,795	39,510	22%	17	1976	Publicly Traded Company
MCKESSON	16	181,241	1,476	1%	18	1833	Publicly Traded Company
GENERAL MOTORS	21	155,929	3,949	3%	31	1908	Publicly Traded Company
PHILLIPS 66	23	149,434	4,762	3%	16	1917	Publicly Traded Company
GENERAL ELECTRIC	24	148,321	15,233	10%	31	1892	Publicly Traded Company
FORD MOTOR	27	144,077	3,187	2%	28	1903	Publicly Traded Company

Source: Authors' analysis based on data from Fortune Global 500 list and Capital IQ company data
Note: China National Petroleum's subsidiary PetroChina is publicly listed

5.2 Chinese Multinationals compared to American companies

In this section we will look at the internationalization of the top ten Chinese multinationals compared to the top ten US multinationals in the Banking, Petroleum, Automotive and Metal Industries.

A) Chinese Top MNCs More Global than Perceived to be

As discussed in Chapter 4, Chinese multinationals have a wide geographical footprint driven, in part, by outbound M&A. In this section, we go into more detail on the internationalization analysis done in Chapter 4 by looking at the international presence of the top ten Chinese multinationals: these firms are present in twenty countries on average, compared with twenty-five countries for the Top 10 US multinationals. It is interesting to note that most Chinese MNCs are much younger (30-40 years old on average) than US MNCs (over 100 years old on average). Lastly, the state still controls directly or indirectly most of the top MNCs in China.

B) Comparison of Top Chinese MNCs and U.S.A. MNCs

We now proceed to take a quick look at some of the largest companies in China, their current strategy and how they compare with their counterparts in the United States in different industries such as Banking, Petroleum, Automotive and Metals. We have selected Chinese companies in the Fortune Global 500 that are most concentrated in these industries.

Chinese and United States Banks

Figure 11 shows a comparison of Industrial & Commercial Bank of China (ICBC) and J.P.Morgan (JPM) – the top banks in China and the United States by total assets. Founded in 1984, Industrial & Commercial Bank of China is the largest bank in the world by total assets. In 2015, the Bank was named the "Best Emerging Markets Bank" by Euromoney, and ranked first among the Top 1000 World Banks by the Banker and the Global 2000 listed by the U.S.A. magazine Forbes for the third consecutive year. In comparison, J.P. Morgan, has its roots going back to 1799 when its earliest predecessor Bank of the Manhattan Company was founded. Today, J.P.Morgan

Figure 11: Comparison of Top Chinese and US Banks

	J.P.Morgan Chase & Co.	Industrial & Commercial Bank of China Limited
Market Cap	233,740	221,595
Total Assets	2,466,096	3,426,776
Total Revenues	88,125	87,322
Net Income	23,958	41,566
Year Founded	1799	1984
Ownership	Publicly Traded	Publicly Traded Company; State-Owned
Countries present in	54	34

Source: Authors' analysis based on data from Capital IQ as of 7/21/2016

Figure 12: Comparison of Top Chinese and US Petroleum Companies

	Exxon Mobil	China Petroleum and Chemical Corporation
Market Cap	389,491	88,109
Total Revenues	219,872	292,532
Net Income	13,020	5,530
Year Founded	1870	1998
Ownership	Publicly Traded	Publicly Traded Company; State-Owned
Countries present in	31	34

Source: Authors' analysis based on data from Capital IQ as of 7/21/2016

is the largest bank in the United States and the world's sixth largest bank by total assets, with its operations spanning fifty-four countries. The company has gone through many mergers and acquisitions and restructurings in its over 200-year history.

Despite being much younger compared to its U.S.A. counterpart, ICBC and the other Big 4 Chinese Banks (China Construction Bank, Agricultural Bank of China and Bank of China) have come to dominate the global banking market. The Big 4 banks in China have total assets of approximately $11.7 billion in comparison to $8.4 billion in total assets for the Big 4 banks in the United States (J.P.Morgan, Bank of America, Citigroup and Wells Fargo). In fact, the smallest of the big four in China, the Bank of China, has more assets than JPMorgan Chase, the biggest bank in the United States. This growth of Chinese banks has been driven by greenfield investments as well as M&A, supported by Chinese government policies. It is also interesting to note that in late-2015, the IMF approved the Chinese currency as a reserve currency, which may lead to more expansion of Chinese financial institutions.

ICBC has made selective acquisitions globally to expand its global operations and presence. For example, in 2014, ICBC acquired control of the South African Standard Bank Group Ltd's markets unit to expand trading spanning commodities and interest rates to currencies. The purchase was in line with the ICBC Chairman Jiang Jianqing's target of tripling the contribution of international earnings to 10% by 2016. Chinese banks like ICBC have been moving ahead to become global banks with comprehensive business covering both commercial and investment banking.

Chinese and United States Petroleum Companies

Figure 12 shows a comparison of the American Exxon Mobil and China Petroleum and Chemical Corporation (or Sinopec Group) – top petroleum companies in U.S.A. and China by total revenues. Sinopec Group is one of the major state-owned petroleum energy and chemicals companies in China, headquartered in Chaoyang District, Beijing. Sinopec's business includes oil and gas exploration, refining, and marketing; production and sales of petrochemicals, chemical fertilizers, and other chemical products; storage and pipeline transportation of crude oil and natural gas; and import/export agency business of oil and chemical products. Sinopec Group ranked the 3rd in the Fortune Global 500 in 2014. In comparison, Exxon Mobil traces its history back to Standard Oil Company formed in 1870. Exxon Mobil, as it exists today, was formed in 1999 by the merger of Exxon and Mobil, both descendants of Standard Oil Company. Exxon Mobil was ranked fifth globally in the Fortune Global 500 for 2015. It is the largest publicly owned oil and gas company in the world by production and has a global presence in thirty-one countries.

Figure 13: Comparison of Top Chinese and US Automotive Companies

	General Motors	Saic Motor
Market Cap	48,894	35,977
Total Revenues	153,909	101,416
Net Income	10,695	4,532
Year Founded	1908	1955
Ownership	Publicly Traded	Publicly Traded Company; State-Owned
Countries present in	31	8

Source: Authors' analysis based on data from Capital IQ as of 7/21/2016

Figure 14: Comparison of Top Chinese and US Metal Companies

	Alcoa	China minmetals
Market Cap	13,901	N.A.
Total Revenues	21,060	37,105
Net Income	-506	-721
Year Founded	1888	1950
Ownership	Publicly Traded	State owned; Public Debt
Countries present in	30	16

Source: Authors' analysis based on data from Capital IQ as of 7/24/2016

In recent years, Sinopec has pursued a strategy of aggressively acquiring overseas oil and natural gas assets. For instance, in 2011, Sinopec acquired the Argentine unit of the American Occidental Petroleum Corp. for $2.45 billion. This acquisition was part of the strategy by Chinese petroleum and natural gas companies to diversify their assets in Latin America. Policymakers in Beijing were also worried about a possible disruption in the country's oil supply, given the fact that nearly half of the country's foreign crude came from the Middle East.

Chinese and United States Automotive Companies

Figure 13 shows a comparison of SAIC Motor Corp. Limited and General Motors– top automotive companies in China and the U.S.A. SAIC Motor Corp. Limited is a publicly traded automotive design and manufacturing company and a subsidiary of the state-owned Shanghai Automotive Industry Corporation (SAIC), which is headquartered in Shanghai, China. SAIC Motor is the largest automaker in China selling 5.9 million vehicles in 2015. In 2014, the company climbed 25 places to rank 60th on the annual Fortune Global 500 list. In comparison, General Motors is a more than 100 year-old company, based in Detroit, Michigan. General Motors has been part of the "Big Three" – Detroit's big three automobile companies (General Motors, Ford Motors and Fiat Chrysler, now Italian-controlled company) and was the world leader in vehicle sales for several decades prior to the Global Financial Crisis of 2008-09. Today General Motors has operations in thirty-one countries and is still among the world's largest automakers by vehicle unit sales, selling 9.8 million vehicles in 2015 alone.

SAIC Motor, like other Chinese MNCs in other industries, has also made acquisitions abroad both to acquire technology as well as to expand its customer base. For example, in 2005 SAIC Motor attempted to acquire the British automaker MG Rover, but in 2005 was outbid by another Chinese automaker, Nanjing Automobile. SAIC Motor did manage to obtain some MG Rover technology that was incorporated into a new line of luxury sedans. SAIC Motor became the owner of MG Rover's 10,000-unit Longbridge plant in Birmingham after a merger with its smaller peer Nanjing Automobile Group in late 2007.

Chinese and United States Metal Companies

Figure 14 shows a comparison of China Minmetals Corp. and Alcoa – top metal companies in China and the U.S.A. China Minmetals is one of the largest metals and minerals trading companies in the world and the largest iron and steel trader in China. It also trades coke, coal, copper, zinc, and lead. The company is a state-owned enterprise under direct supervision of the State-owned Assets Supervision and Administration Commission (SASAC). Currently, China Minmetals has operations in sixteen countries. In

comparison, founded in 1888, Alcoa is the world's third largest producer of Aluminum behind Chinalco and Rusal. Alcoa has its operational base in Pittsburgh, PA and corporate headquarters in New York City.

Similar to the other top multinational companies from China covered in the above sections, China Minmetals has also been active in international acquisitions. For instance, the company acquired in 2009 most of the assets of the Australian Oz Minerals Ltd for $1.4 billion, making it the largest acquisition by a Chinese company in the Australian mining industry. Zhou Zhongshu, then President of China Minmetals Corporation, mentioned the "high quality workforce of OZ Minerals" as an important factor behind the acquisition.

As shown in Figures 11, 12, 13 and 14, despite the fact that the very top Chinese companies in these four industries are all state-owned or state-controlled and still much younger compared to their U.S.A. counterparts, they do have a significant global presence, comparable market capitalization and revenues and assets that in some cases surpass their US counterparts.

Conclusions

As we close this analysis of China's outbound M&A activity, we can see that Chinese companies have come a long way since the early 2000s to become more global by way of increased M&A investments, including in new regions such as Western Europe and Latin America. It has become today a significant global acquirer. Available information also suggests that Chinese investors have been willing to pay a relatively higher price in recent years (especially in the post global financial crisis period) for overseas acquisitions.

We have also seen that while the very top Chinese MNCs are still much younger relative to their U.S.A. counterparts and more directly or indirectly state-controlled, they are comparable to their U.S.A. counterparts in terms of total assets, revenues and market capitalization, and through increased M&A activity have acquired a global presence that is also on a par with top global MNCs in the United States.

Notes

[1] Mergers and acquisitions (M&A) is a general term used to refer to the consolidation of companies. A merger is the combination of two companies to form a new company. An acquisition is the buying of one company by another in which no new company is formed. All the analysis has been done using data on announced M&A transactions from Standard & Poors Capital IQ's database, unless otherwise indicated.

[2] In this chapter all data about China includes Hong Kong as well.

[3]we used UNCTAD data http://unctad.org/en/Pages/DIAE/World%20Investment%20Report/Annex-Tables.aspx to find the Top 10 countries by OFDI in 2013-2015 and then analyzed their outbound M&A transaction data from Capital IQ for 2015 to discover the Top 10 countries for outbound M&A in 2015.

[4] Industry distribution analysis based on S&P Capital IQ's primary industry sectors classification, including Industrials, Consumer, Financials, Information Technology, Healthcare, Utilities, Materials and Energy sectors

[5] Materials includes primarily natural resources, but also chemicals and container & packaging companies.

[6] Industrials includes primarily manufacturing goods and services, but also commercial/professional services.

[7] Acquisition premium is the excess price paid over the average value of the publicly traded share price over a certain period (in our analysis, we have used a week before the announcement of a transaction as the period).

[8] Data from Capital IQ. It should be noted that this does not include all the deals done over these time periods since data on values or other financial information are not reported or publicly disclosed for all the transactions.

[9] Total Enterprise Value, defined as total market capitalization, preferred stock value and total debt less cash andcash equivalents.

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Appendix 5.1: Biggest M&A Deals from July 1, 2015 till June 30, 2016 by decreasing value

Transaction Announcement Date	Target	Total Transaction Value ($USDmm)	Buyers	HQ - Country [Target]	HQ - Country [Buyers]
11/23/2015	Allergan plc (NYSE:AGN)	190,971	Pfizer Inc. (NYSE:PFE)	Ireland	United States
09/17/2015	SABMiller plc (LSE:SAB)	113,215	Anheuser-Busch InBev SA/NV (ENXTBR:ABI)	United Kingdom	Belgium
05/18/2016	Monsanto Company (NYSE:MON)	66,321	Bayer AG (DB:BAYN)	United States	Germany
02/03/2016	Syngenta AG (SWX:SYNN)	43,000	China National Chemical Corporation	Switzerland	China
07/27/2015	Allergan plc, Global Generic Pharmaceuticals Business	40,279	Teva Pharmaceutical Industries Limited (NYSE:TEVA)	United States	Israel
11/17/2015	Norfolk Southern Corporation (NYSE:NSC)	37,039	Canadian Pacific Railway Limited (TSX:CP)	United States	Canada
01/11/2016	Baxalta Incorporated	36,220	Shire plc (LSE:SHP)	United States	Ireland
07/01/2015	The Chubb Corporation	31,551	Chubb Limited (NYSE:CB)	United States	Switzerland
08/04/2015	Baxalta Incorporated	30,908	Shire plc (LSE:SHP)	United States	Ireland
01/25/2016	Tyco International plc	16,758	Johnson Controls International plc (NYSE:JCI)	Ireland	United States
02/23/2016	London Stock Exchange Group plc (LSE:LSE)	15,783	Deutsche Boerse AG (XTRA:DB1)	United Kingdom	Germany
12/07/2015	Keurig Green Mountain, Inc.	14,253	Acorn Holdings B.V.	United States	Netherlands
09/08/2015	Power Assets Holdings Limited (SEHK:6)	13,596	Assets Global International Limited	Hong Kong	British Virgin Islands
11/17/2015	Airgas, Inc.	13,459	Air Liquide SA (ENXTPA:AI)	United States	France
09/08/2015	Oil Search Limited (ASX:OSH)	12,529	Woodside Petroleum Ltd. (ASX:WPL)	Papua New Guinea	Australia
12/15/2015	Sanofi, Animal Health Business	12,457	Boehringer Ingelheim International Gmbh	France	Germany
02/09/2016	ITC Holdings Corp. (NYSE:ITC)	11,478	Fortis Inc. (TSX:FTS)	United States	Canada
08/25/2015	RSA Insurance Group plc (LSE:RSA)	10,934	Zurich Insurance Group AG (SWX:ZURN)	United Kingdom	Switzerland
09/04/2015	TECO Energy, Inc.	10,422	Emera Incorporated (TSX:EMA)	United States	Canada
07/02/2015	K+S Aktiengesellschaft (DB:SDF)	10,401	Potash Corporation of Saskatchewan Inc. (TSX:POT)	Germany	Canada
03/21/2016	IHS Inc.	10,339	IHS Markit Ltd. (NasdaqGS:INFO)	United States	United Kingdom
02/10/2016	Meda AB	10,071	Mylan N.V. (NasdaqGS:MYL)	Sweden	United Kingdom
04/28/2016	Medivation, Inc. (NasdaqGS:MDVN)	9,543	Sanofi (ENXTPA:SAN)	United States	France
03/30/2016	SGS Tool Company	9,046	Kyocera Corp. (TSE:6971)	United States	Japan
12/18/2015	Nanyang Commercial Bank Limited	8,771	China Cinda Asset Management Co., Ltd. (SEHK:1359)	Hong Kong	China
06/21/2016	Supercell Oy	8,600	Tencent Holdings Limited (SEHK:700)	Finland	China
03/16/2016	Strategic Hotels & Resorts, Inc.	8,275	Anbang Insurance Group Co., Ltd.	United States	China
08/06/2015	OCI N.V., European, North American And Global Distribution Businesses	8,000	CF Industries Holdings, Inc. (NYSE:CF)	Netherlands	United States
09/02/2015	Polyus Gold International Limited	7,693	Wandle Holdings Limited	United Kingdom	Cyprus
09/03/2015	Avolon Holdings Limited	7,656	HNA Group Co., Ltd.	Ireland	China
02/17/2016	Ingram Micro Inc. (NYSE:IM)	7,254	Tianjin Tianhai Investment Co., Ltd. (SHSE:900938)	United States	China
07/28/2015	Elster Group SE	6,524	Honeywell International Inc. (NYSE:HON)	Germany	United States
07/28/2015	Italcementi SpA (BIT:IT)	6,473	HeidelbergCement AG (DB:HEI)	Italy	Germany
07/29/2015	Cytec Industries Inc.	6,350	Solvay SA (ENXTBR:SOLB)	United States	Belgium
05/19/2016	FMC Technologies, Inc. (NYSE:FTI)	6,301	Technip SA (ENXTPA:TEC)	United States	France
11/02/2015	Dyax Corp.	5,886	Shire Pharmaceuticals International	United States	Ireland
11/03/2015	King Digital Entertainment plc	5,831	Activision Blizzard, Inc. (NasdaqGS:ATVI)	Ireland	United States
09/08/2015	MS Amlin plc	5,643	Mitsui Sumitomo Insurance Co., Ltd.	United Kingdom	Japan
12/07/2015	Neptune Orient Lines Limited	5,560	CMA CGM S.A.	Singapore	France

Transaction Announcement Date	Target	Total Transaction Value ($USDmm)	Buyers	HQ - Country [Target]	HQ - Country [Buyers]
01/15/2016	GE Appliances Inc.	5,400	Qingdao Haier Co., Ltd. (SHSE:600690)	United States	China
11/27/2015	China TieTong Telecommunications Corporation	5,357	China Mobile Limited (SEHK:941)	China	Hong Kong
01/26/2016	Terex Corporation (NYSE:TEX)	5,230	Zoomlion Heavy Industry Science and Technology Co., Ltd. (SZSE:000157)	United States	China
03/14/2016	Tuxiana Corp. And CITIC Real Estate Co., Ltd.	5,146	China Overseas Land & Investment Ltd. (SEHK:688)	China	Hong Kong
09/29/2015	Reynolds America Subsidiaries And Trademarks For Natural American Spirit Outside U.S.	5,007	JT International Company Netherlands B.V.	Japan	Netherlands
12/03/2015	Komi Oil Ltd	5,000	Gaetano LLC	Russia	United States
08/11/2015	Terex Corporation (NYSE:TEX)	4,633	Konecranes Plc (HLSE:KCR1V)	United States	Finland
09/20/2015	Atmel Corporation	4,446	Dialog Semiconductor Plc (XTRA:DLG)	United States	United Kingdom
08/11/2015	Symetra Financial Corporation	4,414	Sumitomo Life Insurance Company	United States	Japan
05/18/2016	KUKA Aktiengesellschaft (DB:KU2)	4,386	Mecca International (BVI) Limited	Germany	British Virgin Islands
07/29/2015	Industrial Income Trust Inc.	4,279	Global Logistic Properties Limited, Investment Arm	United States	Singapore
06/29/2016	PrivateBancorp, Inc. (NasdaqGS:PVTB)	4,131	Canadian Imperial Bank of Commerce (TSX:CM)	United States	Canada
11/23/2015	Edra Global Energy Bhd	4,011	China General Nuclear Power Corporation	Malaysia	China
12/17/2015	Acerta Pharma B.V.	4,000	AstraZeneca PLC (LSE:AZN)	Netherlands	United Kingdom
12/22/2015	99.81% stake in Finansbank, 0.2% stake in Yatirim and Portföy and 29.87% stake in Finans Finansal	3,935	Qatar National Bank S.A.Q. (DSM:QNBK)	Turkey	Qatar
05/06/2016	Air Products and Chemicals, Inc., Performance Materials Division	3,800	Evonik Industries AG (DB:EVK)	United States	Germany
09/08/2015	Amdipharm Mercury Company Limited	3,531	Concordia International Corp. (TSX:CXR)	United Kingdom	Canada
08/26/2015	Betfair Group PLC	3,502	Paddy Power Betfair plc (ISE:PPB)	United Kingdom	Ireland
01/11/2016	Legend Pictures, LLC	3,500	Dalian Wanda Group Co Ltd	United States	China
04/25/2016	Ball Corporation, Select Metal Beverage Ca Assets, Support and Functions in Europe, Brazil and US	3,420	Ardagh Group S.A.	United States	Luxembourg
06/21/2016	Dematic Group S.à r.l.	3,250	KION GROUP AG (XTRA:KGX)	Luxembourg	Germany
03/11/2016	Portfolio of 19 Hotels Assets in China	3,234	Amare Investment Management	China	Singapore
10/22/2015	MEGlobal B.V.	3,200	EQUATE Petrochemical Company (K.S.C.C.)	United Arab Emirates	Kuwait
08/03/2015	HERE Holding Corporation	3,124	Daimler AG (XTRA:DAI); Bayerische Motoren Werke Aktiengesellschaft (DB:BMW); AUDI AG (DB:NSU)	United States	AUDI AG (DB:NSU) (Germany); Bayerische Motoren Werke Aktiengesellschaft (DB:BMW) (Germany); Daimler AG (XTRA:DAI) (Germany)
02/22/2016	Brake Bros Limited	3,100	Sysco Corporation (NYSE:SYY)	United Kingdom	United States
06/16/2016	Hermes Microvision, Inc. (GTSM:3658)	3,091	ASML Holding NV (ENXTAM:ASML)	Taiwan	Netherlands
03/28/2016	100% of Dell Systems Corporation And Del Technology & Solutions Limited And Dell Services Pte. Ltd.	3,055	NTT DATA, Inc.	Singapore	United States
04/19/2016	SABMiller plc, European Business	2,901	Asahi Group Holdings, Ltd. (TSE:2502)	United Kingdom	Japan
12/09/2015	FRHI Holdings Limited	2,897	Accor S.A. (ENXTPA:AC)	Canada	France
11/13/2015	Skyway Concession Company, LLC	2,836	OMERS Administration Corp.; Canada Pension Plan Investment Board; Ontario Teachers' Pension Plan	United States	Canada Pension Plan Investment Board (Canada); OMERS Administration Corp. (Canada); Ontario Teachers' Pension Plan (Canada)
07/30/2015	Swissport International Ltd.	2,818	HNA Group Co., Ltd.	Switzerland	China
06/30/2016	InterOil Corporation (NYSE:IOC)	2,817	Exxon Mobil Corporation (NYSE:XOM)	Singapore	United States
11/02/2015	MedAssets, Inc.	2,775	Pamplona Capital Management LLP, Private Equity	United States	United Kingdom
05/09/2016	TF Holdings Ltd.	2,770	CMOC Limited	Africa	Hong Kong
06/14/2016	NXP Semiconductors NV, Standard Product Business	2,750	Beijing JianGuang Asset Management Co., Ltd.; Wise Road Capital Ltd.	Netherlands	Beijing JianGuang Asset Management Co., Ltd. (China); Wise Road Capital Ltd. (China)
12/08/2015	Fairchild Semiconductor International Inc (NasdaqGS:FCS)	2,694	China Resources Microelectronics Limited; Hua Capital Management Ltd.	United States	China Resources Microelectronics Limited (China); Hua Capital Management Ltd. (China)
07/16/2015	GETRAG Getriebe- und Zahnradfabrik Hermann Hagenmeyer GmbH & Cie KG	2,670	Magna International Inc. (TSX:MG)	Germany	Canada
01/19/2016	Rouse Properties, Inc.	2,576	Brookfield Asset Management Inc. (TSX:BAM.A)	United States	Canada
04/06/2016	Glencore Plc, Agricultural Products Busines	2,500	Canada Pension Plan Investment Board	United Kingdom	Canada

Transaction Announcement Date	Target	Total Transaction Value ($USDmm)	Buyers	HQ - Country [Target]	HQ - Country [Buyers]
06/05/2016	Asia Square Tower 1	2,499	Qatar Investment Authority	Singapore	Qatar
05/20/2016	InterOil Corporation (NYSE:IOC)	2,488	Oil Search Limited (ASX:OSH)	Singapore	Papua New Guinea
06/02/2016	ALS Limited (ASX:ALQ)	2,478	Advent International Corporation; Bain Capital, LP	Australia	Advent International Corporation (United States); Bain Capital, LP (United States)
07/13/2015	Alent plc	2,351	Platform Specialty Products Corporation (NYSE:PAH)	United Kingdom	United States
12/03/2015	9.01% Stake In Grupo Financiero Inbursa, S.A.B. de C.V. And 17.3% Stake In The Bank of East Asia	2,322	Criteria Caixa, S.A., Single-Shareholder Corporation	Mexico	Spain
11/25/2015	PetroChina Kunlun Gas Co., Ltd.	2,321	Kunlun Energy Company Limited (SEHK:135)	China	Hong Kong
10/01/2015	Representaciones e Investigaciones Medicas, S.A. de C.V.	2,300	Teva Pharmaceutical Industries Limited (NYSE:TEVA)	Mexico	Israel
07/15/2015	Shred-it International Inc.	2,300	Stericycle, Inc. (NasdaqGS:SRCL)	Canada	United States
07/27/2015	Sirius International Insurance Group Ltd.	2,235	CM International Holding Pte. Ltd.	Bermuda	Singapore
12/31/2015	Priory Group Limited	2,224	Acadia Healthcare Company, Inc. (NasdaqGS:ACHC)	United Kingdom	United States
04/15/2016	Polycom, Inc. (NasdaqGS:PLCM)	2,160	Mitel Networks Corporation (NasdaqGS:MITL)	United States	Canada
12/16/2015	Pacific Hydro Pty Ltd.	2,160	State Power Investment Corporation	Australia	China
09/23/2015	Landmark Aviation, L.L.C.	2,065	BBA Aviation plc (LSE:BBA)	United States	United Kingdom
10/21/2015	Viom Networks Limited	2,064	ATC Asia Pacific Pte. Ltd.	India	Singapore
10/17/2015	Wincor Nixdorf Aktiengesellschaft (XTRA:WIN)	2,053	Diebold, Incorporated (NYSE:DBD)	Germany	United States
05/10/2016	RHP Western Portfolio Group And American Home Portfolio Group And AMC Portfolio And MHC Portfolio IV	2,035	Brookfield Property Group LLC	United States	Canada
04/11/2016	gategroup Holding AG (SWX:GATE)	2,016	HNA Group Co., Ltd.	Switzerland	China
05/23/2016	WMF Group GmbH	1,916	SEB SA (ENXTPA:SK)	Germany	France
02/19/2016	Home Retail Group plc	1,916	Steinhoff International Holdings N.V. (JSE:SNH)	United Kingdom	South Africa
11/09/2015	Fidelity & Guaranty Life (NYSE:FGL)	1,897	Anbang Insurance Group Co., Ltd.	United States	China
09/18/2015	Veda Group Limited	1,873	Equifax Inc. (NYSE:EFX)	Australia	United States
03/31/2016	SMCP S.A.S.	1,861	Shandong Ruyi Technology Group Co. Ltd.	France	China

Source: Based on Capital IQ data for announced outbound M&A transactions between July 1, 2015 and June 30 2016.
Note: We have manually excluded the domestic transactions and those global transactions where a consortium of investors/companies from multiple countries were involved.

Chapter 6

Expanding Business through Regional Integration in Asia

Lorenzo Pavone, Deputy Head, Partnerships and Networks Unit, OECD Development Centre

Global economic uncertainty poses a risk to the continued growth of Asia. Strengthening regional integration and economic community initiatives is essential to support growth and development in the region. The increased market size generated by strengthening regional integration can facilitate cross-border production chains that leverage the comparative advantages of individual nations and increase productivity. The knowledge sharing that accompanies increased cross-border trade, capital flows and mobility spurs innovation, attracts investment and supports job creation. Moreover, the enhanced policy coordination accompanying integration increases a region's macroeconomic stability and capacity to withstand external shocks.

This chapter provides insights and suggested policy recommendations from the business sector on the trade and investment implications of enhanced economic integration in Southeast Asia, China and India, with a particular focus on the ASEAN Economic Community. This Note gives an overview of the business and macroeconomic trends in Asia, describes public policy efforts to facilitate greater regional ties and offers private sector insights on opportunities and bottlenecks in areas such as infrastructure, investment and labour mobility. It also analyses the regional implications of China's slowdown. The analysis is based partly on discussions at the OECD Emerging Markets Network (EMnet)[i] meeting on doing business

in Asia "Expanding Business through Regional Integration , held on 8 March 2016.

6.1 Background: Asia's business and economic overview

Asia will account for 34% of the world's gross domestic product (GDP) by 2019 (OECD, 2015a). GDP growth in the 12 Emerging Asia countries (ASEAN-10[2], People's Republic of China [hereafter "China"] and India) will be robust with a forecasted annual average growth rate of 6.4% for 2016 and 6.3% for 2017 (OECD, 2016b).

Yet, growth paths differ substantially. Robust growth is projected to continue above 6% over 2016-17 in the Philippines and Viet Nam. Growth slowed down in 2015 in Indonesia and Malaysia due to reduced external demand. Thailand's growth reached 2.8% in 2015, a marked improvement from 2014, when political turmoil reduced growth to 0.8%. The low-income countries of Cambodia, Lao People's Democratic Republic and Myanmar are expected to grow at more than 7% over 2016-17 (OECD, 2016b). Brunei Darussalam and Singapore will sustain more moderate growth prospects. The slowdown in China will put downward pressure on regional growth. However, the overall prospects for Southeast Asia are favourable (Table 1).

Table 1: Real GDP growth of ASEAN-10, China and India (Annual percentage change)

Country	2014	2015	2016	2017
ASEAN-5				
Indonesia	5.0	4.8	5.2	5.9
Malaysia	6.0	5.0	4.6	4.8
Philippines	6.1	5.9	6.0	6.1
Thailand	0.8	2.8	3.3	3.6
Viet Nam	6.0	6.7	6.3	6.1
Brunei Darussalam and Singapore				
Brunei Darussalam	-2.3	-0.6	0.8	1.1
Singapore	2.9	2.0	2.3	2.4
CLM countries				
Cambodia	7.1	7.0	7.1	7.1
Lao PDR	7.4	7.4	7.1	7.1
Myanmar	8.7	8.7	8.2	8.3
China and India				
China	7.3	6.9	6.5	6.2
India	7.2	7.4	7.4	7.5
Average of ASEAN 10 countries	4.6	4.7	4.9	5.3
Average of Emerging Asia	6.7	6.6	6.4	6.3

Note: The cut-off date of data is 1 June 2016. Weighted averages are used for the ASEAN average and Emerging Asia average. Emerging Asia includes the ASEAN 10 economies plus China and India. The results of China, India, and Indonesia, including projections for 2016 and 2017, are based on the OECD Economic Outlook No 99.
Source: OECD (2016), "Special supplement: Update June 2016", in Economic Outlook for Southeast Asia, China and India 2016: Enhancing Regional Ties, OECD Publishing, Paris. doi: http://dx.doi.org/10.1787/saeo-2016-25-en

External factors are increasingly impacting Asian economies. Reduced demand from China and the uncertain impact of Japan's Abenomics, combined with expected US monetary policy normalisation, are fuelling economic uncertainty. While declining oil prices have impacted current-account balances positively in oil-importing nations, they also have created incentives for developing energy-intensive manufacturing.

From 1970 to 2010, capital accumulation played a major role in the catch-up stage and during the early stages of industrialisation in Asia (OECD, 2013). However, the role of pure capital accumulation as a growth driver is declining in some Asian economies. In addition, increased competition in manufacturing sectors is reshuffling global value chains (GVCs) and has shifted some production activity to lower-cost locations within Asia or Africa. Innovation in manufacturing and improved productivity can help Asian countries regain their comparative advantages. Moving away from an economy fuelled exclusively by industry to a knowledge-based one can help Asian countries avoid a "middle-income trap." Innovation through research and development (R&D) and improvements in workforce productivity can play central roles in increasing domestic productivity levels and supporting the transition to knowledge-based economies (OECD, 2014).

A) Emerging trends on Asian multinational corporations

Multinational corporations from emerging markets are now an important force in international business. These companies have specific characteristics that can differentiate them from their counterparts from developed markets (*e.g.* family or state ownership,

visionary leadership and clear understanding of the needs of low-income segments)[3].

They also have the ability to survive challenging investment climates in emerging markets, such as poor infrastructure, bad governance, regulatory uncertainties and weak educational institutions (OECD, 2016d).

Firms in Emerging Asia are becoming increasingly active in the region and globally. Exporting is rebounding and flows of outward foreign direct investment are growing. Large firms, particularly from China, India, Malaysia, Singapore and Thailand, are expanding their trade and investment relationships within the region and beyond. Intra-ASEAN trade surged by more than sevenfold in the past 20 years, from USD 82 billion in 1993 to approximately USD 600 billion in 2014, representing 24% of which was intra-ASEAN total trade (ASEAN, 2015).

Strengthening regional ties and boosting trade in the region can be another tool to promote economic growth and private investment in a period of global economic uncertainty. The following section will discuss recent ASEAN Economic Community developments as well as new trade agreements under discussion.

6.2 Regional integration: Prospects and challenges

The Association of Southeast Asian Nations (ASEAN) was established in 1967 to accelerate economic and social development in the region and promote increased peace and stability. Regional integration in the ASEAN region has expanded through various frameworks and agreements since the 1980s, increasing its geographic coverage and issues addressed over time. A number of additional frameworks for regional integration have emerged, including ASEAN+3 (ASEAN, Japan, China and Korea) and ASEAN+6 (ASEAN+3, India, Australia and New Zealand).

Since the 1990s ASEAN has deepened its focus on integration through trade and investment. The establishment of the ASEAN Economic Community (AEC)—a process for economic integration launched in 2015 among the ten ASEAN members—is a milestone and has significant implications for the private sector. The AEC is, after all, one of the world's fastest growing investment destinations. In 2013, Emerging Asia alone made up 70% of the world's population and 26% of global GDP (ASEAN, 2014). The ASEAN region alone accounted for 11% of total global foreign direct investment (FDI) inflows in 2014, compared with only 5% in 2007 (ASEAN, 2015). In addition, the number of ASEAN enterprises among the top 2 000 global companies went from 49 in 2006 to 70 in 2015 (OECD, 2016a).

Given the size of the market, strengthening regional ties can further promote growth and create new business opportunities. The AEC can support businesses and encourage innovation by forming a single market and enhancing cross-border production in this fast-growing region. The AEC is expected to facilitate a freer flow of skilled labour in key sectors, which will help expand the talent pool across the region.

Furthermore, ASEAN+3 has worked on forming a basis for financial stability in Asia, and co-operation has expanded to tourism, agriculture, energy and minerals. Meanwhile, ASEAN+6 has focused on trade, investment and finance. ASEAN+6 members have made progress, for example, in negotiating a Regional Comprehensive Economic Partnership (RCEP) trade agreement.

Regional trade agreements are still evolving with the final round of RCEP negotiations planned for September 2016, and the Trans-Pacific Partnership (TPP)—a trade agreement among 12 countries which will increase Asian connections with the Americas—still awaiting signatory ratification. It is unclear how the agreements ultimately will affect regional trade and investment dynamics. The increasing network of

regional trade agreements in Asia (Figure 1), often referred to as the "noodle bowl", creates complexities for consolidation (OECD, 2016a).

The TPP and RCEP may affect ASEAN solidarity and hinder the development of the economic community (ADB, 2014). On the other hand, the comprehensiveness of these agreements will enable ASEAN to connect with regional partners as members pursue other trade agreements (OECD, 2016a)

Regional integration can bring with it new business opportunities, spur innovation and enhance cross-border production; however increased trade and financial links also brings with it volatility. The private sector is an important factor in Asian investment. With the uncertainty that accompanies both the beginning and deepening of regional integration, it is important to understand how the private sector is responding to both the opportunities and the uncertainty of Asian regional integration.

Emerging Asian multinationals have a comparative advantage, as they can leverage stronger regional roots to expand their business. First of all, they have a higher knowledge of the regional market and are more familiar with local consumers' behaviours. Furthermore, they have the potential to reduce their cost structure, due to locational advantages, by sourcing raw materials and inputs from neighbouring countries (OECD, 2016d).

With the AEC still in its infancy it is an opportune moment to incorporate the views of the private sector into the AEC development. Accordingly, the next section will provide an overview on private-sector insights regarding increased regional integration in Asia.

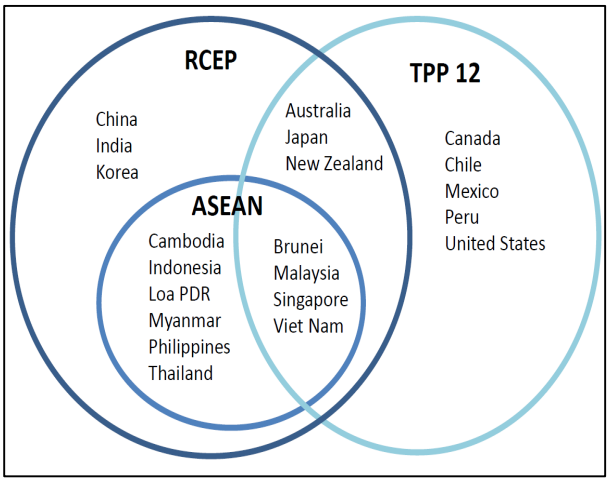
6.3 Private-sector sectoral insights on expanding business through regional integration

The private sector discussed implications of regional integration in Asia and key policy areas for improving the investment climate at the EMnet business meeting held at the OECD Headquarters in Paris, France, on 8 March 2016. Topics of discussions include logistics and global value chains, infrastructure, labour market and talent retention, finance, energy, innovation and technology, and the role of small- and medium-sized enterprises. The private sector also paid particular attention to the consequences of China's economic slowdown.

Logistics and global value chains | ASEAN should capture higher parts of the global value chain by owning brand names and technology

Participants stressed the importance for Asian companies to compete at higher parts of value chains through brand names and technology. The participation of Southeast Asian and East Asian economies in global value chains (GVCs) has increased from 43% in 2001 to 49% in 2011 (OECD and World Bank, 2015). However, ASEAN companies participate primarily in GVCs by contributing small components that generate employment but are limited to a marginal portion of the overall value chain. For instance, approximately 59% of the value of the iPhone is captured by the United States, while the rest of the

Figure 1: SEAN, TPP, and RCEP member states as of March 2016



Source: Authors elaboration. Note: The relative size of the circles does not represent the levels of importance.

value is dispersed among Korea, China and the rest of the world (Kraemer et al., 2011). To get a higher part of the value chain, it is essential to own the brand name and technology, which can be acquired through technology transfers or mergers and acquisitions. Participants proposed that a group of multinationals should be nurtured in Asia to move higher up in the value chain.

Infrastructure | Financially viable projects are crucial to channel capital into infrastructure investments

The main goal of financing infrastructure is to channel the region's available funds to viable and sustainable projects. The region has abundant capital in the form of foreign exchange reserves and savings. In ASEAN, foreign exchange reserves totalled approximately USD 700 billion in 2016 (IMF, 2016) and the average savings rate was 33% of GDP in 2014 (World Bank, 2016). The key is to create a framework for investors to properly assess risk and distribute funds to infrastructure projects that are the most viable and sustainable. Mahindra World City in Chennai, India is an example of a financially viable and well-designed project. Built on the model of sustainable urbanisation, Mahindra World City integrates offices, residences and schools. It has become the blueprint of the Smart Cities Mission, India's plan to develop 100 smart cities (Box 1.1).

Participants identified underdeveloped financial systems, significant upfront costs for long-term investment and the lack of financially viable and well-designed infrastructure projects as challenges.

Box 1.1 India's Smart Cities Mission

The Smart Cities Mission is an Indian government initiative for urban renewal. It aims to develop 100 sustainable cities from 2015-2020, seeking to boost economic growth and enhancing quality of life by using technology, information and data to improve infrastructure and services. The Indian Cabinet approved USD 15 billion to develop 100 smart cities and rejuvenate 500 others. The first 20 smart cities to be developed were announced in January 2016. The Smart Cities Mission will provide investment opportunities for the private sector to partner with the Indian government in such sectors as manufacturing, logistics, tourism and services.

Sources: Government of India, "Smart Cities Mission", Ministry of Urban Development, http://smartcities.gov.in/ (accessed on 18 April 2016)

Financial systems are largely bank-dominated, with commercial banks accounting for over 82% of total financial assets in ASEAN (ADB, 2013). In India, banks have played a crucial role in infrastructure financing, but the corporate bond market still is underdeveloped (Reserve Bank of India, 2015).

Large upfront costs are another constraint for long-term investment from the private sector. In the ASEAN region, tight prudential regulations can sometimes discourage banks from extending long-term credit. In India, financial institutions are strained due to increasing levels of stressed assets in the infrastructure sector. For example, infrastructure loans, which made up 15% of total bank loans, represented 30% of total stressed loans in 2015 (Reserve Bank of India, 2015). Participants pointed out that this is because companies are required to commit large amounts of money in initial stages of infrastructure projects. A proposed solution to reduce risks for the private sector was for the government to fund projects initially, and roll in public-private financing at a later stage.

The Asian Infrastructure Investment Bank (AIIB) is a China-led multilateral development institution which opened for business in January 2016 with USD 100 billion in capital (AIIB, 2015). In cooperation with existing multilateral development banks and 57 member countries, the AIIB seeks to contribute to Asian infrastructure development and regional connectivity (AIIB, 2016a). The bank is already financing infrastructure projects in Indonesia, Tajikistan, Bangladesh and Pakistan (AIIB 2016b).

China has also led other infrastructure development initiatives in the region, including the One-Belt-One-Road initiative (OBOR). The OBOR is an economic development initiative primarily covering Eurasia with the goal of creating greater economic interdependencies in the region and to advance infrastructure. The initiative is supported in a number of ways, including The Silk Road infrastructure fund

which represents USD 40 billion in support (Bloomberg, 2015).

Participants also pointed out the lack of financially viable and well-designed infrastructure projects for the private sector. In some cases, this was partially due to the large role played by state-owned enterprises. For example, Indonesian state-owned enterprises will develop a total of 73 projects worth USD 25 billion in 2016, including power plants and toll roads (Deal Street Asia, 2016). Participants expressed strong interest in accessing similar opportunities. OECD analysis shows the negative impact of limited or restricted private capital flows on both infrastructure and non-infrastructure business investments (Blundell-Wignall and Roulet, 2015). Initiatives such as the Indonesian Government's 2011 Master Plan for Acceleration and Expansion of Indonesian Economic Development 2011-25 (MP3EI) recognise the important role the private sector plays in economic development (OECD, 2015b). With this plan, the government hopes to lower regulatory barriers to investment and increase cooperation between the public and private sectors (WTO, 2013).

Beyond such initiatives, to ensure the inclusion of the private sector, it is important for governments to maintain the principle of competitive neutrality; this occurs when no entity operating in an economic market is subject to undue competitive advantages or disadvantages (OECD, 2012). This creates a business environment where goods and services are produced by those who do so most efficiently.

Labour market and talent retention | Companies struggle to find talent due to emigration, language barriers and lack of soft skills.

The private sector faces many difficulties in the labour market despite efforts to facilitate freer flow of skilled labour within ASEAN. Participants pointed to a range of challenges, including: labour cost volatility, local talent shortages, and a lack of soft skills and English language skills.

The proportion of employers reporting talent shortages in Asia Pacific was 48% in 2015, higher than the global average of 38% (ManpowerGroup, 2015). Non-IT Indian companies experienced hardships in hiring engineers. In Thailand, companies found it difficult to attract locals into manufacturing, as the country is driven by agriculture. Lack of soft skills and talent migration into Singapore were key challenges faced by the private sector in Malaysia.

The private sector is working with universities and governments to address the talent crunch and to develop soft skills. Business organisations also are making efforts to work closely with university networks. Regional initiatives are being pursued to integrate and harmonise education systems and promote collaborative research. Furthermore, ASEAN Mutual Recognition Arrangements allow professionals in key sectors, such as medical doctors, dentists, nurses, architects, engineers, accountants, surveyors and tourism professionals, to work more easily in ASEAN countries. However, additional policy initiatives are needed to create new and qualified employment.

Finance | Both the pros and cons of financial integration should be carefully considered.

Participants broadly agreed that financial integration is key to diversifying financial resources, lowering the cost of financing and triggering integration in the industrial sector. Participants noted that financial integration would facilitate the design of frameworks and tools to channel existing funds towards lucrative projects. Participants also noted that corporates are playing a limited but very important role in financial integration. For example, companies are investing in digital wallets[4], cross-border money transfer, rural financing, global depository receipts[5] and payments banks[6].

Meanwhile, participants highlighted the growing importance of the financial integration of China in the global economy. For example, the

renminbi will be included in the International Monetary Fund's (IMF) Special Drawing Rights (SDR) beginning in October 2016. SDRs are an international reserve asset created by the IMF that can be exchanged into currencies. The value of the SDR is based currently on a basket of four currencies, the US dollar, the euro, the Japanese yen and the pound.

Energy | The region should shift further to renewable energies as they improve their competitiveness and are supported by favourable government policies.

Asia is emerging as a key market for renewable energy development, driven by China and India. Significant regional investment in renewable energy is occurring and enhanced regional integration could stimulate investment further. China is the largest global investor in renewable power, investing USD 103 billion in 2015 and accounting for 36% of world investment (FS-UNEP, UNEP and BNEF, 2016). In India, for example, solar photovoltaic (PV) has become in some regions more cost effective compared to conventional energy such as coal (Box 1.2)

Box 1.2 China and India are ramping up in investment in cost-competitive renewables

China leads the world in renewable power investments. In 2015, China's investment rose by 17% to reach USD 102.9 billion, representing 36% of global investment in renewable power. India is also increasing investment rapidly and 2015 investment reached USD 10.2 billion, a 22% increase from 2014.

China and India are setting ambitious goals to scale-up investment in renewable energies. The commitments by China to install 200 gigawatts (GW) of wind power and 100 GW of solar photovoltaic power (PV) by 2020 and by India for 100 GW of solar photovoltaic power by 2022 highlight the government support to renewables. With China's ambitious 13th Five Year Plan, the country aims to have at least 750 GW of renewables capacity available. This would bring the amount of available Chinese renewables to more than all OECD countries combined. In the case of India, ambitious commitments in 2015 represent a five-fold increase from target set in 2010 to reach 20 GW of installed solar energy by 2020. At COP 21, India and France also launched an International Solar Alliance of 120 countries with the goal of investing in one terawatt of additional solar power capacity by 2030.

From a market dynamics perspective, solar PV has become more and more cost competitive over the years in certain regions of India. This is because investments in renewable energy drive down the cost of their production, expanding the market for their adoption and making further investment more attractive. For example, Solairedirect, an Engie subsidiary, won 140 MW in solar projects in the Rajasthan state with an offer of INR 4.35 per KwH, compared to INR 4.65 for coal. Solar is becoming competitive in terms of project delivery (in between tendering and final commissioning). Unlike mining, drilling or extraction, manufacturers benefit from learning curves that make production increasingly efficient and cost effective. Solar PV facilities of up to 200 MW can now be delivered in 13 months and such projects are becoming more attractive to international banks seeking to invest in India.

Sources: IEA (2015), *World Energy Outlook 2015*, OECD/IEA Publishing, Paris, http://dx.doi.org/10.1787/weo-2015-en; UNFCCC (2015), "India and France Launch International Solar Energy Alliance at COP21", Announcement, United Nations Framework Convention on Climate Change, November 30, http://newsroom.unfccc.int/clean-energy/international-solar-energy-alliance-launched-at-cop21/; ENGIE (2016) "ENGIE Wins Solar Energy Project Bidding for 140 MW in India", Press Release, January 25, www.solairedirect.com/es/actualites/engie-wins-solar-energy-project-bidding-for-140-mw-in-india/; FS-UNEP (Frankfurt School-UNEP Collaborating Centre for Climate and Sustainable Energy Finance), UNEP (United Nations Environment Programme) and BNEF (2015), Global Trends in Renewable Energy Investment 2015, Frankfurt School-UNEP Collaborating Centre for Climate and Sustainable Energy Finance, Frankfurt, http://fsunep-centre.org/publications/global-trends-renewable-energy-investment-2015; Matthews, J. (17 May 2016), "Developing countries and the renewable energy revolution", OECD Development Centre Blog, www.oecd.org/dev/developing-countries-and-the-renewable-energy-revolution.htm.

Innovation and technology | Innovation and technology can facilitate regional integration.

Innovation and technology facilitates regional integration. "Glocalisation," which combines globalisation and localisation in the business software sector, is a rigorous and costly process of adaptation to local language and regulations. Participants stressed that harmonisation of regulations through the regional integration progress will reduce the costs of "glocalisation" significantly.

SMEs | Sharing business knowledge, simplifying administrative processes and encouraging free movement of people will facilitate SME investments in Asia.

Regional co-operation can play a role in encouraging investments by small- and medium-sized enterprises (SMEs). Most large companies have operations in Asia, but SMEs tend to lack resources for international expansion. Sharing business knowledge, simplifying administrative processes and encouraging free movement of people will encourage SME growth. One example is the Make in India Mittelstand programme, which was initiated to facilitate investment and market entry in India for German SMEs.

Prospects and challenges of regional agreements AEC | The AEC still faces regional economic disparities, non-tariff barriers and restrictive services policies

The AEC has advanced toward establishing a single market and production base, but participants pointed to the challenge of remaining regional economic disparities among ASEAN members. OECD analysis shows that per capita income levels in 2014 varied widely from USD 78 958 in Singapore to USD 3 093 in Cambodia, creating challenges for economic integration (OECD, 2016a).

Participants also expressed concerns that non-tariff barriers are emerging as new protective measures. Intra-regional tariffs have fallen rapidly over the last decade to 0.5% in 2014 (OECD, 2016a). However, non-tariff barriers remain, such as anti-dumping regulations as well as constraints related to logistics, transport, infrastructure and regulatory frameworks. Participants also stressed that domestic regulations should be focused on further liberalising trade in services. ASEAN's average score on the Services Trade Restrictions Index (STRI) is 52% higher than the global average (World Bank, 2012).

Uncertainty| Ongoing trade agreements can create uncertainty in business decision-making

The private sector is finding it difficult to determine where to invest in the context of multiple ongoing regional integration processes. Participants noted that the TPP addresses new trade challenges, such as the digital economy and intellectual property rights. The TPP's open-ended approach also was considered a positive aspect to engage more members in the future. Yet, China's absence raises questions about TPP's comprehensiveness. Requirements for regulatory convergence in intellectual property rights, state-owned enterprises and competition also have caused reluctance among some ASEAN members to join the TPP.

Meanwhile, some participants highlighted the relevance of the RCEP for the business world. They pointed out that RCEP is more relevant in the short term since the final round of RCEP negotiations is planned for late 2016, while the TPP's ratification will take several years.

The private-sector plays a key role in the investment and growth of the Asian region. China is a major part of the Asian economy; it is the largest contributor to FDI outflows and the second largest host economy to FDI inflows in developing Asia (UNCATD, 2016). China's development and growth will influence the region for both public and private sectors. The next section will address the potential business implications of a Chinese slowdown.

6.4 Business implications of China's slowdown

Slow Growth| China's growth is expected to slow resulting in decreased export demand, reduced FDI, market volatility

The slowdown in China's economy will continue to affect the growth prospects of the rest of the region as export demand drops and investment flows decline, though countries vary in their level of exposure to these risks. At the same time, neighbouring countries have recorded solid performance and are attracting increasing amounts of FDI.

China's growth is expected to slow to 6.2% by 2017 affecting the region through declining export demand, reduced FDI and financial market volatility. Countries with extensive merchandise exports to China, such as Malaysia (12% of GDP), Singapore and Thailand (6-8% of GDP), already have begun to feel the impacts of reduced demand. Malaysia and Thailand feel the effects of China's slowdown since they depend on FDI inflows from China as an important source of investment. Increasing financial links in the region also heighten the spill-over effects of financial market fluctuations. Over the short term, China's slowdown will be a demand shock to neighbouring countries that can be partially mitigated by domestic macroeconomic policies. Over the longer term, China's slowdown is likely to bring about structural changes in industry and trade in many Asian countries (OECD, 2016a).

Two Tier Economy| China's slowdown should be understood in terms of its two-tier economy

China is a two-tier economy. Primary, secondary, and tertiary industries made up respectively 9%, 41% and 50% of GDP in 2015, according to the National Bureau of Statistics of China. The two tiers of China's economy refer to the secondary and tertiary industries. One half of China is the "old" economy, or the secondary industry, such as manufacturing, mining and construction. These sectors are going through a hard landing, with year-on-year nominal growth close to 0% in 2015 (Siepmann, 2015). The other half of China's economy is the "new" economy, or the tertiary industry, that consists of services and consumption. These sectors experienced strong growth. For example, year-on-year nominal growth of tertiary industries reached nearly 12% in the third quarter of 2015 (Siepmann, 2015). In other words, it was the tertiary industries that drove China's total growth in 2015.

China is transitioning towards a new growth model. However, it is the old economy that has the most direct implications for the rest of the world, especially commodity exporters. China's structural reforms are creating uncertainty for the rest of the region. Reform of state-owned enterprises is particularly important to improve efficiency, manage non-performing debt and reduce excess capacity. If successful, China may be able to increase potential growth and improve productivity in the long run. Participants agreed that China's transition may be painful for the rest of the world in the short term; however, it has the potential to bring long-term benefits for the global economy.

The Impacts | China's slowdown impacts its neighbours through six main channels

The implications and impact of China's slowdown on other countries depends on the structure of the economy and the ability to take advantage of opportunities and minimise risks. China's neighbours are impacted through six mains channels:

- *Decrease in export demands:* Many developing Asian countries have depended on the Chinese market to export commodities. However, as China restructures from "hard" sectors to the service sector, countries that have been dependant on China for exports are being impacted negatively.

- *Lower commodity prices*: With lower prices and less demand, commodity exporters are hard hit. Lower prices can benefit countries that depend on imports and opens opportunities for large commodity importers, such as India.
- *Rising labour costs*: Labour costs are rising in some sectors as a consequence of the current economic transition. Countries that are able to enhance competitiveness in these sectors can benefit from the Chinese slowdown.
- *Exchange rates impacts:* The renminbi fell nearly 5% against the U.S. dollar in 2015 (Financial Times, 2016). Asian currencies face downward pressure due to large economic interdependencies (OECD, 2016c). Further impact will depend on whether devaluation continues and on the policy responses from other countries to remain competitive.
- *Outward Chinese FDI*: Despite the slowdown, China will continue to invest in extracting natural resources. Although overall investment volumes may decline, China's demand for commodities will remain important.
- *Cost of capital*: China has been a net capital exporter, which contributed to low global interest rates caused by an excess of global desired saving, largely from China (Society of Actuaries, 2016). It is unclear how monetary policy and liberalisation will have an effect on foreign exchange rates.

The Opportunity | Chinese overcapacity and low commodity prices create opportunities for low-cost procurement

Commodity importers in Asia can leverage China's overcapacity to source raw materials at a low cost. China produces eight to ten times more steel, aluminium, tires and batteries than India. For example, India and China produced 86.5 and 823 million tonnes of crude steel respectively, out of total global production of 1 665 million tonnes in 2014 (World Steel Association, 2015).

6.5 The way forward

While the slowdown of the Chinese economy will influence the region for both the public and private sectors, increased regional integration offers a way forward for ASEAN in the face of global economic uncertainty. Although regional ties have been significantly enhanced since the 1980s, additional policy efforts are required to fully achieve integration targets.

Countries in the region need to make additional efforts and take active steps to realise a single economic market and promote economic integration. To achieve these objectives, the *Economic Outlook for Southeast Asia, China, and India 2016* stresses the following actions as important measures:

- Improve co-ordination between regional initiatives and national agendas to ensure policy alignment;
- Tackle regional disparities to fill development gaps and lower barriers towards implementing uniform policies, targets and approaches;
- Promote greater co-operation with non-ASEAN partners as well as those in ASEAN+3 and ASEAN+6, which already has proven useful in areas like financial stability, trade and investment promotion, and environmental and disaster risk management;
- Improve monitoring indicators, policy evaluation and analysis, and knowledge-sharing;
- Focus on green issues, including the use of large renewable energy resources, to address the high environmental price of economic progress; and
- Address private sector development to allow local companies to move from small- and medium-sized enterprises (SMEs) to "ASEAN enterprises," while encouraging more FDI inflows.

The private sector highlights several elements as critical for boosting regional integration in Asia and creating a favourable investment climate for inclusive growth and development:

- ASEAN should capture higher parts of the global value chain by owning brand names and technology.
- Financially viable projects are crucial to channel capital into infrastructure investments.
- Talent development and retention are essential to overcome language barriers and lack of soft skills.
- Higher financial integration can better support regional projects.
- The region should shift further to renewable energies as they improve their competitiveness.
- Higher focus on innovation and technology is key to further develop value-added sectors.
- Sharing business knowledge, simplifying administrative processes and encouraging free movement of people will facilitate investments in Asia.
- Understanding and leveraging the implications of China's slowdown is crucial to doing business in the region.

Conclusion

Even in the context of a Chinese slowdown, enhanced regional ties in Asia can still generate significant opportunities for private sector growth. In particular, the AEC has the potential to support higher trade and investment in the region. This process can be particularly beneficial for multinational corporations from Emerging Asia. Due to geographical proximity and familiarity with the regional context, they have the potential to have higher market penetration and lighter cost structure than their competitors from developed economies. However, some challenges remain, particularly in areas such as trade in goods, trade in services, investment and capital, infrastructure and connectivity, and human and social development. Policy makers need to concentrate efforts to reduce economic gaps and growth disparities, decrease non-tariff barriers and limit restrictive services policies.

Notes

[i] Emerging Markets Network (EMnet) is an initiative dedicated to the private sector hosted by the OECD. Managed by the Development Centre, the Network fosters dialogue and analysis on emerging economies and their impact on global economic, social and environmental issues. EMnet gathers top executives of multinational companies from diverse sectors, willing to engage in debates with high-level policy makers, including heads of state and ministers, and OECD experts. EMnet events are closed to the public and media and operate under Chatham House rule to encourage open and dynamic discussions on doing business in Africa, Asia and Latin America.

[2] ASEAN member states include Brunei Darussalam, Cambodia, Indonesia, Lao People's Democratic Republic (hereafter "Lao PDR"), Malaysia, Myanmar, Philippines, Singapore, Thailand and Viet Nam.

[3] See also L. Casanova and A. Miroux, 'Emerging Multinationals: The coming of age' in OECD (2016d), pp. 13-28, http://www.oecd.org/dev/development-philanthropy/EMnet_Business_insights_2015.pdf.

[4] A digital wallet is an electronic device for electronic commerce transactions using a smartphone.

[5] A global depository receipt is a certificate issued by a depository bank that purchases shares of foreign companies and deposits it in the account.

[6] A payments bank is a basic banking service for people without bank accounts.

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Conclusions

With the rise of emerging economies as key outward FDI investors and the remarkable expansion of their multinationals, a new global FDI landscape is settling in. The change is profound and the disruptions that the emergence of these new players can cause through the displacement of trade and investment flows, the creation of new business models, or their contribution to a new geography of innovation, are worth examining. Countries, regions and companies have begun to feel the pressure and will need to adjust to this new competition to survive.

The expansion of OFDI from emerging economies has been remarkable since the turn of the century, opening a new phase of outward investment from such economies. During that period, OFDI from Latin America was clearly outpaced by that from Asia. China in particular emerged as a major investor in the global FDI scene, in a remarkable OFDI expansion strongly supported by government policy. The Global Financial Crisis - which opened new opportunities for emerging market multinationals, especially from Asia - marked a turning point in the period. Another important feature, in particular in the most recent years, is the progressive evolution in the geographical distribution of outward investment from Emerging Market Multinationals. Initially, these enterprises tended to invest primarily in their natural markets, with Latin American eMNCs targeting Latin American markets, and Asian eMNCs targeting Asian markets. In the following stage of their expansion, their path diverged. Asian firms (especially Chinese) expanded to Latin America as well as Africa, in search mostly for natural resources. Then, at a later stage - largely in the post Global Financial Crisis period - they began expanding into developed markets. The expansion of Chinese OFDI in Europe, for instance, driven by the search for technology and markets, illustrates this later phase. In the case of Latin America, as illustrated by Brazil - by far the largest outward investor in the region- when firms had ventured beyond their natural markets they have targeted mostly developed economies. There is indeed an asymmetry here: while Asian firms invest in Latin America, the reverse is not true.

A natural consequence of these new OFDI flows is the increasing power of Emerging Market Multinationals. The significant presence of eMNCs in the ranking by revenues of Fortune Global 500 is a telling indicator of the inroads made by these enterprises in the global corporate world: about 30% of the Fortune Global 500 are enterprises of the E20, a group of top 20 emerging economies, compared to 10% ten years ago. Not only are these new players among the largest in terms of revenues worldwide, they have also become industry leaders: today about 40% of the top 5 firms (by revenues) in 8 key industries are E20 firms while there were none in 2004. eMNCs however have a number of distinctive features that are worth further exploring. First, while eMNCS have definitely entered the circles of the largest companies in the world, they still have some way to go regarding profits and market capitalization. Emerging Market Multinationals seem to be sacrificing profits for revenues, for instance. In addition, they are not yet as international as, for example, their American or Japanese counterparts, though their global footprint is larger than expected based on the number of countries in which they are present.

As the report is going to press, the slowdown in China, the fall of commodity prices and the tightening of the economy in the United States are portending a more challenging phase for developed and emerging economies. Although it could be argued that emerging economies have learnt from previous crises and are better prepared this time, whether this is the beginning of a slowdown or a more important and deeper crisis remains to be seen. The recent trends underscored above regarding investments in developed countries seem to be a strategy for emerging multinationals to offset possible market volatility at home, and may be a survival strategy. In that respect, the transformation of their firms into fully grown and powerful multinational corporations can help emerging economies address this challenging phase. In this context, assessing the impact of outward FDI on home (emerging) economies is as crucial as ever.

Finally, the report has highlighted the remarkable surge of China as a global investor since the turn of the century – in particular after the Global Financial Crisis - and its expansion in both emerging and developed markets, its emergence as a global acquirer and the inroads made by Chinese multinationals in the global corporate world. This phenomenon, with its economic and political implications, is impacting the new international order that is shaping up at present and is worth further exploring.

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